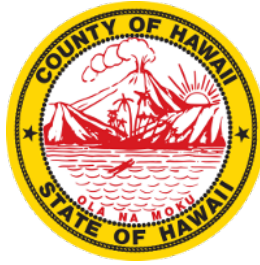


COUNTY OF HAWAI'I
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE DIVISION



SPECIFICATIONS

FOR

WEST HAWAI'I SANITARY LANDFILL
GAS COLLECTION AND CONTROL SYSTEM
EXPANSION AT CELLS 9, 10 AND 11

JOB NO. SW- 4543

TMK: 7-1-003:017

January 2020

PU'UANA HULU, NORTH KONA, HAWAI'I
COUNTY AND STATE OF HAWAI'I

TABLE OF CONTENTS

| <u>PART I - BIDDING AND CONTRACT REQUIREMENTS</u> | PAGES |
|--|--------------|
| NOTICE TO BIDDERS | 1 - 3 |
| SPECIAL NOTICE TO BIDDERS | 1 - 3 |
| PROPOSAL | 1 - 15 |
| NOTICE TO PROVIDERS AND PROSPECTIVE PROVIDERS OF HAWAII PRODUCTS | 1 - 1 |
| PERFORMANCE BOND | 1 - 2 |
| LABOR AND MATERIAL PAYMENT BOND | 1 - 2 |
| MINIMUM WAGE SCHEDULE | 1 - 23 |
| <u>PART II - SPECIAL PROVISIONS</u> | 1 - 22 |
| <u>PART III - SPECIFICATIONS</u> | |
| <u>DIVISION 1 - GENERAL REQUIREMENTS</u> | |
| SECTION 01000 GENERAL REQUIREMENTS | 1 - 18 |
| SECTION 01010 SUMMARY OF WORK | 1 - 1 |
| SECTION 01060 SAFETY AND HEALTH | 1 - 2 |
| SECTION 01110 CWSRF | 1 - 58 |
| NOT USED | |
| SECTION 01300 SUBMITTALS | 1 - 8 |
| SECTION 01310 CONSTRUCTION SCHEDULE | 1 - 2 |
| SECTION 01620 STORAGE AND PROTECTION OF MATERIALS | 1 - 1 |
| SECTION 01720 MEASUREMENT AND PAYMENT | 1 - 6 |
| <u>DIVISION 2 – SITE WORK</u> | |
| SECTION 02001 LFG HEADER AND LATERAL PIPELINES | 1 - 7 |
| SECTION 02002 LANDFILL GAS VERTICAL WELL INSTALLATION | 1 - 8 |
| <u>DIVISION 3 – CONCRETE</u> | NOT USED |
| <u>DIVISION 4 - MASONRY</u> | NOT USED |
| <u>DIVISION 5 - METALS</u> | NOT USED |
| <u>DIVISION 6 – WOOD AND PLASTICS</u> | NOT USED |
| <u>DIVISION 7 – THERMAL AND MOISTURE PROTECTION</u> | NOT USED |

| | |
|--|----------|
| <u>DIVISION 8 - DOORS AND WINDOWS</u> | NOT USED |
| <u>DIVISION 9 - FINISHES</u> | NOT USED |
| <u>DIVISION 10 - SPECIALTIES</u> | NOT USED |
| <u>DIVISION 11 - EQUIPMENT</u> | NOT USED |
| <u>DIVISION 12 - FURNISHINGS</u> | NOT USED |
| <u>DIVISION 13 - SPECIAL CONSTRUCTION</u> | NOT USED |
| <u>DIVISION 14 - CONVEYING SYSTEM</u> | NOT USED |
| <u>DIVISION 15 - MECHANICAL</u> | NOT USED |
| <u>DIVISION 16 - ELECTRICAL</u> | NOT USED |

NOTICE TO BIDDERS
(Chapter 103D, HRS)

ELECTRONIC SEALED BIDS for furnishing all tools, equipment, materials and labor necessary for the construction of the “WEST HAWAII SANITARY LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION AT CELLS 9, 10 and 11,” Job No. SW-4543, Pu‘uanahulu, North Kona, Hawai‘i, will be received and recorded immediately via the Public Purchase System until 2:00 p.m., Hawai‘i Standard Time, on February 27, 2020. Electronic bids shall be submitted via the Public Purchase System, otherwise the bids shall not be opened or considered. Bids received after the time fixed for opening will not be considered.

This project consists primarily of installing landfill gas extraction wells, pipe header, pipe laterals, aboveground pipe crossing, backfill and pipe supports, testing, connection to existing system, commissioning, appurtenances and incidentals to expand the Gas Collection and Control System at the West Hawai‘i Sanitary Landfill in accordance with the plans and specifications.

To be eligible to submit a bid, the Bidder must possess a valid State of Hawai‘i contractor licenses. See Special Notice to Bidders for licensing requirements and Supplemental Special Notice to Bidders for additional requirements.

Prospective Bidders and all interested parties interested in accessing the plans, specifications, terms and conditions, proposal, and addenda must be registered as a Public Purchase Vendor, Hawaii Region, and Hawai‘i County Agency. New Vendors should click on the link to Public Purchase provided on the www.hawaiicounty.gov webpage or go to www.publicpurchase.com to initiate the registration process. Bids shall be submitted via the Public Purchase System. Confidential material shall be readily separable from the bid in order to facilitate public inspection of the nonconfidential portion of the bid.

Prospective Bidders must file with the Director of Public Works their “Intent to Bid.” The Prospective Bidder’s Intent to Bid must be received by the Administration Office, Department of Public Works no later than 4:30 p.m., ten (10) calendar days prior to the bid opening date. If the tenth day is on a Saturday, Sunday or State holiday, the Intent to Bid is due on the next working day following the due date. The Intent to Bid form is available at the Administration Office, Department of Public Works, Phone: (808) 961-8321 and for electronic download at the Public Purchase website: www.publicpurchase.com

The original executed and notarized Standard Qualification Questionnaire for Offerors form “SQQO” must be received by the Administration Office, Department of Public Works, no less than forty-eight (48) hours prior to the 2:00 p.m. bid opening so it may be evaluated and approved by the County of Hawai‘i, Department of Public Works prior to bid opening. Please submit said form to allow for evaluation and approval by our office if such form had not been evaluated, approved and filed within the twelve (12) months, if there is any change in your previous responses as they relate to this project, or if additional information is requested. The SQQO form is available in hard copy at the Administration Office, Department of Public Works, Phone: (808) 961-8321 and for electronic download at the Public Purchase website: www.publicpurchase.com

All prospective bidders/offerors are invited to attend a pre-bid conference to be held on February 6, 2020 at 9:30 am at the West Hawai‘i Sanitary Landfill, 71-1111 Queen Ka‘ahumanu Highway, Waikoloa, Hawai‘i. Attendance at the pre-bid conference is not a condition for submitting a bid. Subcontractors and union representatives are invited, but not required to attend. The conference is to provide bidders/offerors with an opportunity to ask questions about the contractual requirements and all technical aspects of the project. A site visit

will follow the pre-bid conference for bidders desiring to visit the site as part of the pre-bid conference. Site is an active landfill and safety shoes and safety vest will be required. Site visits other than the date of the pre-bid conference must be scheduled no less than 24 hours in advance. Due to the nature of this project, all prospective bidders/offerors are strongly encouraged to attend the pre-bid conference and site visit.

The bid opening and pre-bid conference(s) required for this project (if any, as set forth above) are scheduled at venues that are accessible to persons with disabilities. To request an auxiliary aid or for language interpretation services, please contact the Department of Public Works at (808) 961-8321 no less than five (5) working days prior to the established meeting date(s).

The Director of Public Works reserves the right to reject any or all bids to waive informalities. No Bidder may withdraw its bid after the hour set for the opening thereof or before the award of the contract, unless said award is delayed for a period exceeding ninety (90) consecutive calendar days.

County of Hawai'i is an Equal Opportunity Provider and Employer.



David Yamamoto, P.E., Director
Department of Public Works
County of Hawai'i

State of Hawai'i ~ Hawai'i Awards & Notices Data System (HANDS)
Public Purchase, Electronic Procurement System
Publication Date: January 16, 2020

SPECIAL NOTICE TO BIDDERS

“Reminder Note: “A” general engineering contractors and “B” general building contractors are reminded that due to the Hawai‘i Supreme Court’s January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the “A” and “B” contractor may still bid on and act as the “prime” contractor on a “A” or “B” project (See, HRS § 444-7 for the definitions of an “A” and “B” project.), respectively, the “A” and “B” contractor may only perform work in the areas in which they have the appropriate contractor’s license (An “A” or “B” contractor obtains “C” specialty contractor’s licenses either on its own, or automatically under HAR § 16-77-32.). The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.”

Bidders must possess a valid State of Hawai‘i **“A” General Engineering license** and the specialty licenses included in the attached “Minimum Contractor Licensing Requirements for Project” have been determined by the County to be required.

1. Contractor Licensing requirements for the project will be discussed during the Mandatory Pre-Bid Conference for the project on the date and time established by the Notice to Bidders.
 - a. Anyone who disagrees with the “Minimum Contractor Licensing Requirements for Project” shall raise objections during the Pre-Bid Conference or submit written comments no later than ten (10) consecutive calendar days prior to bid opening.
2. Failure to list Sub-contractors having valid licenses in accordance with the “Minimum Contractor Licensing Requirements for Project” will result in automatic disqualification of the bid as a non-responsive bid.
3. The “1% Rule” as it is commonly referred to regarding work requiring specialty licenses is a discretionary waiver mechanism and is not grounds for an automatic waiver. The County has no intention of granting discretionary waivers for bids failing to list Sub-contractors in accordance with the “Minimum Contractor Licensing Requirements for Project”.

WEST HAWAI'I SANITARY LANDFILL GCCS EXPANSION AT CELLS 9, 10 and 11
Job No. SW-4543
MINIMUM CONTRACTOR LICENSING REQUIREMENTS FOR PROJECT

Reference: (a) HAR Title 16, Chapter 77, Contractors
(b) Okada Trucking Ruling

| License | Description | Comment/Remarks |
|---------|--|--|
| C-43 | Sewer, sewage disposal, drain and pipe laying contractor | • Covered by "A" General Engineering Contractor License. |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Notes:

1. The above list provides the minimum Contractor licensing requirements for the project and reflects the County's current understanding of the relevant licensing requirements. As per the Special Notice to Bidders it is the sole responsibility of the contractor to review the requirements of the project and determine the appropriate licenses that are required to complete the project and to determine if additional specialty licenses will be required for performance of the work.
2. The Contractor is advised that any disagreements with the above listing regarding Contractor Licensing Requirements required for the performance of the work to complete this project shall be made during the Pre-Bid Conference or by submitting written comments no later than ten (10) consecutive calendar days prior to bid opening.

RESPONSIBILITY OF OFFERORS

Offeror is advised that if awarded a contract under this solicitation, Offeror shall, upon award of the contract, furnish proof of compliance with the requirements of §103D-310(c), HRS:

1. Chapter 237, tax clearance;
2. Chapter 383, unemployment insurance;
3. Chapter 386, workers' compensation;
4. Chapter 392, temporary disability insurance;
5. Chapter 393, prepaid health care; and
6. One of the following:
 - a. Be registered and incorporated or organized under the laws of the State, hereinafter referred to as a "Hawai'i business"; **or**

- b. Be registered to do business in the State, hereinafter referred to as a “compliant non-Hawai‘i business.”

Refer to the Award of Contract provision herein for instructions on how to comply with the above requirements.

CAMPAIGN CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS
PROHIBITED, PURSUANT TO HAWAI‘I REVISED STATUTES (HRS) §11-355

If awarded a contract in response to this solicitation, offeror agrees to comply with HRS §11-355, which states that campaign contributions are prohibited from a State and County government contractor during the term of the contract if the contractor is paid with funds appropriated by the legislative body between the execution of the contract through the completion of the contract.

HAWAI‘I REVISED STATUTES, CHAPTER 103B - EMPLOYMENT OF STATE
RESIDENTS ON CONSTRUCTION PROCUREMENT CONTRACTS, AS AMENDED

HRS Chapter 103B, unless its application is in conflict with any federal law or will disqualify the County from receiving federal funds or aid, shall apply to this contract. It requires the Contractor and applicable subcontractor(s) to perform its contract with a workforce of which not less than eighty percent (80%) are Hawai‘i residents. Reference Special Provisions 7.1(p) for related project specific requirements

HAWAI‘I REVISED STATUTES, SECTION 103-55.6, PREFERENCE FOR BIDDERS IN
APPRENTICESHIP PROGRAMS

The preference for bidders in apprenticeship programs (reference Special Provisions Section 7.1, Subsection (o) and Item 10, Section (B)) shall apply to this project if the estimated cost is \$250,000.00 or more, unless it is in conflict with any federal Law or if it would disqualify any county agency from receiving federal funds or aid.

CODE OF ETHICS

If you are an officer or employee of the County of Hawai‘i, or a business in which an officer or employee or officer or employee’s immediate family has a controlling interest, the provisions of Hawai‘i County Code §2-83(c) must be complied with before a contract for goods or services may be entered into with any County agency.

Revised: 11/25/2019

PROPOSAL
FOR
WEST HAWAI'I SANITARY LANDFILL
GAS COLLECTION AND CONTROL SYSTEM
EXPANSION AT CELLS 9, 10 AND 11

PU'UANAHULU, NORTH KONA
COUNTY AND STATE OF HAWAI'I

JOB NO. SW-4543

The Honorable Harry Kim, Mayor
County of Hawai'i
Hilo, Hawai'i

Sir:

The undersigned Bidder hereby proposes to furnish and pay for all materials, tools, transportation, equipment, labor and other incidental work necessary to construct and complete in place the "WEST HAWAI'I SANITARY LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION AT CELLS 9, 10 AND 11," Job No. SW-4543, Pu'uanahulu, North Kona, Hawai'i, together with equipment and all necessary appurtenances and work incidental thereto in accordance with the true intent and meaning of the plans, Notice to Bidders, Special Notice to Bidders, Proposal, Wage Rate Schedule, General Specifications, and Detail Specifications, made a part of these specifications; and Standard Specifications for Public Works Construction (September, 1986) and General Requirements and Covenants (July, 1972), made a part of these specifications by reference; and any other form of pertinent proposed contract documents which have been attached herein and hereby made a part of the project specifications and contract documents, which are on file in the Administration Office, Department of Public, Works, City of Hilo, County and State of Hawai'i, for the Total Basic Bid of:

_____ DOLLARS (\$_____)

The Bidder agrees to complete work within the time periods specified below including the date of commencement as specified in a written order by the Director, Department of Public Works, County of Hawai'i.

Basic Bid 90 Consecutive Calendar Days from NTP

In order that the Contractor may be awarded within the available funds, each Bidder must and is required to complete this proposal with the following additive alternate bids:

Additive Alternate No. 1, add the Total Lump Sum Bid of:

_____ DOLLARS (\$_____).

The Bidder agrees to complete the same within ZERO (0) consecutive calendar day in addition to the Basic Bid.

It is understood that the award of the contract shall be based on the lowest Basic Bid or combination of Basic Bid and any Additive Alternate Bid if the Basic Bid does not exceed available funds.

It is understood that any Additive Alternate Bid Items not incorporated in the Contract may be added to the contract via a formal Field Order or Change Order as dictated by the actual conditions.

PROPOSAL SCHEDULE

WHSL GCCS EXPANSION AT CELLS 9, 10 AND 11 PU'UANA HULU, NORTH KONA, HAWAII

| <u>BASIC BID</u> | | | | | |
|-------------------------|-----------|------|--|----------------|------------|
| Item No. | Est. Qty. | Unit | Description | Unit Bid Price | Amount Bid |
| 1 | 1 | LS | Mobilization and demobilization | Lump Sum | \$ |
| 2 | 283 | VF | Vertical LFG Well (non-asbestos waste) | \$ | \$ |
| 3 | 6 | EA | Wellheads and Appurtenances | \$ | \$ |
| 4 | 1,140 | LF | Above Grade 6-inch HDPE Pipe | \$ | \$ |
| 5 | 440 | LF | Above Grade 12-inch HDPE Pipe | \$ | \$ |
| 6 | 1 | EA | Above Grade Road Crossing | \$ | \$ |
| 7 | 1 | EA | Tie-In to Existing GCCS | \$ | \$ |
| | | | | \$ | \$ |
| | | | TOTAL BASIC BID | \$ | |

| <u>ADDITIVE ALTERNATE 1</u> | | | | | |
|------------------------------------|-----------|------|------------------------------------|----------------|------------|
| Item No. | Est. Qty. | Unit | Description | Unit Bid Price | Amount Bid |
| A1 | 30 | VF | Vertical LFG Well (asbestos waste) | \$ | \$ |
| A2 | 24 | Hr | Standby Cost | \$ | \$ |
| A3 | 3 | Day | Crew Accommodation | \$ | \$ |
| A4 | 30 | VF | Refusal | \$ | \$ |
| | | | TOTAL ADDITIVE ALTERNATE 1 | \$ | |

Clarifications to Proposal Schedule:

1. All required and necessary items which there are no specific pay items shall be considered as incidental work for a complete project. Costs for all required and necessary items shall be considered incidental and included in the bid prices of the various pay items provided within the proposal schedule. Refer to Section 01720.

The Director also reserves the right, during construction, to decrease or increase the scope of work, because of limitations of funds, with no adjustment in unit prices other than that specified hereinabove.

It is also understood and agreed that the quantities for any item on which a Lump Sum bid is required in this proposal are approximate only and that payment will be made only for the item in place complete, regardless of the amount of material, equipment and labor necessary to complete the same in a proper and workmanlike manner and in accordance with the Plans and Specifications. No guaranty is given that the quantities in the Lump Sum items are more than approximately correct as the quantities shown distributed in the Lump Sum items are given only for the purpose of making monthly estimates. The Bidder and/or Contractor shall verify these quantities in any manner it deems necessary or expedient.

It is also understood and agreed that the estimated quantities shown for items for which a Unit Price is asked in this Proposal are only for the purpose of comparing on a uniform basis, bids offered for the work under this Contract, and the undersigned agrees that it is satisfied with and will at no time dispute said estimated quantities as a means of comparing the bids. It is understood and agreed that it will make no claims for anticipated profit or loss of profit because of a difference between the quantities of the various classes of work done or the materials and equipment actually installed and the said estimated quantities. On Unit Price bids, payment will be made only for the actual number of units accepted and incorporated in the finished product at the Unit Price bid.

It is also understood and agreed that if the product of the Unit Price bid by the number of units does not equal the total amount named by the Bidder for any item, it will be assumed that the error was made in computing the total amount and for the purpose of computing the lowest Bidder, the named Unit Price alone will be considered as representing the Bidder's intention and

the total amount bid on such item shall be considered at the amount arrived by multiplying the Unit Price by the number of Units.

It is understood and agreed that the Director reserves the right to increase or decrease the quantities given in the Proposal in order that the award may be made within the funds allocated for this project.

It is understood and agreed that the liquidated damages shall be as set forth in the Requirements and Covenants of the County of Hawai'i (July, 1972) as amended per Special Provisions and determined for this Project to be as follows:

| | |
|------------|--------------------------|
| Basic Bid: | \$1,000 per calendar day |
|------------|--------------------------|

It is also understood and agreed that the Director reserves the right to accept or reject any and all bids and to waive any and all defects and informalities, when in its opinion, such rejection or waiver will be for the best interest of the County of Hawai'i.

It is also understood and agreed that the award of the contract hereunder shall be conditioned upon the Director having the right to hold all bids for a period of ninety (90) consecutive calendar days from the opening hereunder unless otherwise required by law, during which time no bid may be withdrawn.

The Bidder hereby agrees that if it is awarded this contract, it will enter into and execute the same within ten (10) days from the date of notice to award and furnish a bond in the amount and character required within the time specified by the specifications Section 103D-324, Hawai'i Revised Statutes.

The Bidder represents that it () has, () has not, participated in a previous contract or subcontract subject to the Equal Employment Opportunity Clause of Executive Order 11246 of September 24, 1965, as amended October 31, 1967; that it () has, () has not, filed all required compliance reports; that it () has, () has not, an affirmative action program on equal employment opportunity; that it will, if required, furnish a written Affirmative Action Program; and that representations including submission of required compliance reports, signed by proposed subcontractors, will be obtained prior to the contract awards.

The Bidder further represents that it will, if required submit and require proposed subcontractors to submit a compliance report prior to the award of the contract or subcontract and a written Affirmative Action Program, if required, within a specified time after award.

The Bidder further agrees that if awarded the contract and if it FAILS to enter into and execute the contract and furnish the required bond within the specified time, the county may determine the bidder has abandoned the contract and thereupon forfeiture of the security accompanying its proposal shall operate and the same become property of the County of Hawai'i.

The Bidder further understands and agrees that by submitting this proposal,
1) it is declaring its proposal is not in violation of Chapter 84, Hawai'i Revised Statutes, concerning prohibited State contracts, and 2) it certifying that the price(s) submitted was/were independently arrived at without collusion.

Substitution of Retainage. Pursuant to Section 103-32.2, Hawai'i Revised Statutes, the contracting officer may enter into agreement with the Contractor which will allow the Contractor to withdraw from time to time the whole or any portion of the sum retained under Section 103-32.1 upon depositing with the contracting officer any general obligation bond of the State of Hawai'i or counties of Hawai'i, Maui, Kauai or City and County of Honolulu with a market value of not less than the sum to be withdrawn. A certificate of market value from a bank or trust company or stock brokerage firm must be submitted with the bond. If registered bonds are used, they must be assigned irrevocably to the County of Hawai'i.

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BID SECURITY REQUIREMENTS:

- a. The Offeror is required to upload a PDF copy of the bid security as a required element of this solicitation. The Public Purchase option of mailing in the bid security is **not allowed**.
- b. The offeror must submit the original bid security **within five (5) working days from the notification of intent to award**. If the offeror fails to comply with this requirement, the procurement officer has the option to reject the electronically submitted offer. (HAR 3-122-9[d])

Bid Security Provided (check one):

- ☐ Legal Tender
- ☐ Certificate of Deposit
- ☐ Certified Check
- ☐ Surety Bond (according to Section 103D-323, Hawai‘i Revised Statutes and Chapter 3-122, Subchapter 24, Hawai‘i Administrative Rules.)

for the sum of _____

_____ DOLLARS (\$ _____)

being not less than the sum required under Section 103D-323, Hawai‘i Revised Statutes and Chapter 3-122, Subchapter 24, Hawai‘i Administrative Rules, payable to County of Hawai‘i, Director of Finance.

~This space intentionally left blank~

The Bidder represents: **(Check ✓ one only)**

- ☐ A **Hawai'i business** incorporated or organized under the laws of the State of Hawai'i; **OR**
- ☐ A **Compliant Non-Hawai'i business** not incorporated or organized under the laws of the State of Hawai'i, but registered at the State of Hawai'i, Department of Commerce and Consumer Affairs Business Registration Division to do business in the State of Hawai'i.

State of incorporation: _____

Bidder is:

- ☐ Sole Proprietor ☐ Partnership ☐ Corporation
- ☐ Joint Venture ☐ Other _____

Federal I.D. No.: _____

Hawai'i General Excise Tax License I.D. No.: _____

Business street address: _____

City, State, Zip Code: _____

Payment address (if different than business street address above): _____

Telephone No. _____

Facsimile No. _____

Email Address _____

Date: _____

Respectfully submitted,

Authorized (Original) Signature of Bidder

Print Name

Print Title**

Exact Legal Name of Company (Bidder)*

(SEAL)

*If Bidder is a "dba" or a "division" of a corporation, furnish the exact legal name of the corporation under which the awarded contract will be executed:

** Please attach to this page evidence of the authority of this officer to submit bid on behalf of the company, giving also his address and the names and addresses of the Vice-President and Secretary.

NOTE: Fill in all blank spaces with the information asked for or bid may be invalidated.
Reference is made to Article 2.7 (Preparation of Proposal) of the General Requirements
1. and Covenants (July, 1972) and as amended by Special Provisions

LISTING OF SUBCONTRACTORS

In compliance with the provisions of Chapter 103D-302, HRS, and Chapter 3-122-21, Subchapter 5, Hawai'i Administrative Rules, the Bidder shall include in its bid the names of each person or firm to be engaged by the Bidder as a joint contractor or subcontractor in the performance of the public work construction contract. The bid shall also indicate the nature and scope of the work to be performed by such joint contractor or subcontractor. All bids which do not comply with the requirement may be rejected at the Director's discretion.

| Name of Joint Contractor or Subcontractors | <u>Nature and Scope of Work</u> |
|---|--|
| (Complete Firm Name and Contractor's License Number) | (Complete Specialty Contractor Classification Number and Scope of Work) |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

(Attach additional sheet as necessary)

revised: 05/25/04

HAWAI'I APPRENTICESHIP PREFERENCE

Section 103-55.6, Hawai'i Revised Statutes, as enacted by S.B. 19, Act 17, SLH 2009, provides for a Hawai'i Apprenticeship Preference for public works construction projects with estimated values of \$250,000.00 or greater. The preference shall be in the form of a five percent (5%) bid adjustment applied to the Bidder's bid amount.

Any Bidder seeking the Hawai'i Apprenticeship Preference for the purpose of this bid shall:

- (1) be a party to an apprenticeship program registered with the State Department of Labor and Industrial Relations (DLIR) at the time of its bid for each apprenticeable trade the Bidder will employ to construct the public works project for which the bid is made; and
- (2) completely fill-in the Schedule of Project Apprenticeship Trades attached here to attesting to the trades the Bidder will employ to perform the work; and
- (3) for each apprenticeable trade the Bidder will employ for this project, submit with its bid fully executed and authorized CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (FORM 1) form(s) issued by the DLIR verifying participation in apprenticeship program(s) registered with DLIR; and
- (4) fully execute the certification below.

Failure to comply with ALL of the conditions noted above, without exception, shall disqualify the Bidder from qualifying for, and thus receiving, benefit of the Hawai'i Apprenticeship Preference.

Subcontractors do not have to be a party to an apprenticeship agreement for the Bidder to obtain the preference.

Upon successful verification of the Bidder's executed Form I documents submitted with its bid, the Director will apply the Hawai'i Apprenticeship Preference and decrease the Bidder's total bid amount by five percent (5%) for evaluation purposes only. The Hawai'i Apprenticeship Preference will apply in conjunction with other statutory preferences (i.e., Hawai'i Products Preference).

While preference for Hawai'i Apprenticeship will be taken into consideration to determine the low bidder, the contract awarded shall be in the amount of the bid, exclusive of any preferences.

Upon applying for the Hawai'i Apprenticeship Preference, the Contractor shall certify each month that work is being conducted on the project, that it continues to be a participant in the relevant apprenticeship program for each trade it employs. Said monthly certification shall be made on MONTHLY REPORT OF CONTRACTOR'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (FORM 2) form issued by the DLIR. Failure or refusal of the contractor to submit its monthly certification forms, or at any time during the construction of the project, cease to be a party to a registered apprenticeship agreement for each apprenticeable trade the contractor employs, the contractor will be subject to the sanctions afforded by law, as determined by the Director.

This preference shall not apply if it will be in conflict with any Federal Law or if it would disqualify any County Agency from receiving federal funds or aid. FORM 1 and FORM 2 (referenced above) and the List of Construction Trades in Registered Apprenticeship Program and the List of Persons Authorized to Certify Contractor Participation in Apprenticeship Programs (Act 17) are available on DLIR's Workforce Development Division's website at: <http://labor.hawaii.gov/wdd/home/employers/apprenticeship/resources/>

I do hereby attest that it is our intention to apply for the Hawai'i Apprenticeship Preference, that we satisfy all of the requirements to qualify for the preference, and that we shall comply with all applicable requirements conferred upon us by receiving this preference for the duration of the contract; and

I do hereby state that all of the information provided in the attached Schedule of Project Apprenticeship Trades is true and accurate:

Name: _____

Its: _____

Signed: _____

Date: _____

| SCHEDULE OF PROJECT APPRENTICESHIP TRADES | | |
|--|---|-----------|
| APPRENTICEABLE TRADES (as of 10/21/2019) Refer to : http://labor.hawaii.gov/wdd/home/employers/apprenticeship/resources/ | Bidder intends to employ a person or persons of the following trades in the performance of this project: (Initial below accordingly) | |
| | YES | NO |
| Boilermaker | | |
| Bricklayer-Mason | | |
| Carpenter | | |
| Cement Finisher | | |
| Construction Craft Laborer | | |
| Construction Equipment Operator | | |
| Drywall | | |
| Electrical Wireperson | | |
| Electrician | | |
| (Electrician) Wireperson | | |
| Elevator Constructor | | |
| Fire Sprinkler Fitter | | |
| Floor Layer | | |
| Glazier | | |
| Heat and Frost Insulator | | |
| Heavy Duty Repairman and Welder | | |
| Ironworker Shop Fabricator/Welder | | |
| Ironworker (Reinforcing) | | |
| Ironworker (Structural) | | |
| Landscape and Irrigation Laborer | | |

~continued on next page~

| SCHEDULE OF PROJECT APPRENTICESHIP TRADES (cont'd) | | |
|--|---|-----------|
| APPRENTICEABLE TRADES (as of 10/21/2019) Refer to : http://labor.hawaii.gov/wdd/home/employers/apprenticeship/resources/ | Bidder intends to employ a person or persons of the following trades in the performance of this project: (Initial below accordingly) | |
| | YES | NO |
| Millwright | | |
| Painter | | |
| Paving Equipment Operator | | |
| Plasterer | | |
| Plumber | | |
| Pointer-Caulker-Weatherproofer | | |
| Refrigeration Air-Conditioning | | |
| Roofer | | |
| Sheet Metal Worker | | |
| Steamfitter/Welder | | |
| Stone Mason | | |
| Taper | | |
| Telecommunication/CATV Installer Technician | | |
| Tile Setter | | |
| Truck Operator and Driver | | |
| | | |
| | | |

NOTE: The above listed trades are provided for the convenience of the Bidder and are based on the information available as of the date noted in the schedule's header. It shall be the Bidders responsibility to add, delete or appropriately amend the list to reflect the apprenticeable trades recognized by the State Department of Labor and Industrial Relations at the time Bidder's bid is made. Blank rows are provided in the above for this purpose.

HAWAI'I PRODUCT PREFERENCE

In accordance with Section 103D-1002, Hawai'i Revised Statutes, the Hawai'i Products Preference is applicable to this bid. Hawai'i products may be available for certain work required for construction of this project. The Hawai'i products list is available on the State Procurement Office's ("SPO") website at <http://spo.hawaii.gov/for-vendors/hawaii-product-preferences/>. For further information about the manufacturer(s), click on the manufacturer(s) that is/are listed.

Bidders' attention is directed to the Special Provisions, Section 10 (Preferences), Subsection A (Preference for Hawai'i Products).

Bidders intending to include in their bids products that are NOT on the State Procurement Office's Hawai'i Products List ("HPL") are directed to the section of these specifications titled "NOTICE TO PROVIDERS AND PROSPECTIVE PROVIDERS OF HAWAI'I PRODUCTS."

Determination of the low bidder will be based on the preference in effect at the time of bid opening. As of October 1, 2010, a ten percent (10%) preference is established for Class I Hawai'i products (provided that Hawai'i input exceeds 50%) and a fifteen percent (15%) preference is established for Class II Hawai'i products. The total bid, taking this preference into consideration and providing for additional bid criteria or preferences applicable to the project, shall be utilized in determining the apparent low bidder on the project. However, the contract amount shall be the amount of the bid offered exclusive of the preference.

Bidders shall completely fill-in the following SCHEDULE OF HAWAI'I PRODUCT PREFERENCE CLAIMS in accordance with the following instructions:

1. "Cost" shall be the total cost of furnishing the Hawai'i product F.O.B. jobsite, unloaded, including applicable general excise tax and use taxes.
2. "Credit" shall be the quotient of the "Cost" and "%" values for each Hawai'i product on this schedule. Where necessary, round up to the nearest penny.
3. Meanings of all other terms appearing on the Schedule shall be consistent with the SPO's HPL.
4. Fill-in all information neatly, legibly and completely. Abbreviations are acceptable provided no ambiguity is created by their use.

Bidders may copy the attached schedule and attach additional sheets as necessary.

The Director reserves the right to disqualify individual line item preferences claimed by the Bidder on the attached schedule due to use of non-certified Hawai'i products; provision of inaccurate or incomplete information; or any other inconsistency or omission that may affect the award of the contract. The Bidder will be notified by the Director of any such disqualifications prior to award.

| SCHEDULE OF HAWAII PRODUCT PREFERENCE CLAIMS | | | | | | | | | |
|--|-----------------|--------------|-----------------------|----------|------|------------|-------|----------------|-------|
| CERTIFIED HAWAII PRODUCT | | | | | | PREFERENCE | | | |
| Product Category | Class (I or II) | Manufacturer | Product & Description | Quantity | Unit | Cost (A) | % (B) | Credit (A x B) | |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| | | | | | | \$ _____ | _____ | \$ _____ | _____ |
| TOTAL: | | | | | | \$ _____ | | \$ _____ | _____ |

WAGE CERTIFICATE FOR CONSTRUCTION CONTRACTS

Pursuant to HRS §103-55.5, Wages and Hours of employees on public works construction contracts, I hereby certify that if awarded a contract to construction of a public work project in excess of \$2,000, which is subject to chapter 104, HRS, the bidder or offeror shall affirm the bidder's or offeror's intent to comply with the requirements of chapter 104, HRS, by certifying that:

- (1) Individuals engaged in the performance of the contract on the job site shall be paid:
 - (A) Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and
 - (B) Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day; and
- (2) All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

Dated: _____

Name of Contractor

Authorized Signature

By: _____
(Type or Print Name)

Title: _____

Project Title: West Hawai'i Sanitary Landfill Gas Collection and Control System Expansion at Cells 9, 10 and 11

District: Pu'uānāhulu, North Kona, Hawai'i

Job No. SW-4543

END OF PROPOSAL

WHS� GCCS Expansion at Cells 9, 10 and 11
Job No. SW-4543

PROPOSAL - 15

NOTICE TO PROVIDERS AND PROSPECTIVE PROVIDERS OF HAWAII PRODUCTS

In accordance with Section 103D-1002, Hawaii Revised Statutes, the Hawaii Products Preference is applicable to this bid. Hawaii products may be available for certain work required for construction of this project. The Hawaii products list is available on the State Procurement Office's ("SPO") website at <http://spo.hawaii.gov/for-vendors/hawaii-product-preferences/>. For further information about the manufacturer(s), click on the manufacturer(s) that is/are listed.

Any offeror desiring a Hawaii product preference for a product not on the SPO's list shall submit an original, completed form SPO-38, *Certification for Hawaii Product Preference* to the Director, Department of Public Works, County of Hawaii specifically for this project:

NO LATER THAN FEBRUARY 6, 2020

Certification application form SPO-38, *Certification for Hawaii Product Preference* is available from the SPO's website at <http://spo.hawaii.gov/form-a/spo-038/>. Please note that the link provided for the form may have a 'revised date' included in the title; use the latest version.

Form SPO-38 shall be completed, signed and submitted by the company that is producing or manufacturing the product in Hawaii and one form shall be submitted for each individual product – no exceptions. Certification applications received after the date stated above will NOT be considered; incomplete or inaccurate forms shall be rejected.

The Director shall review all submitted applications for *Certification for Hawaii Product Preference* and determine, at his sole discretion, if the product qualifies for the preference. The Director may request additional information deemed necessary to render said determination and it shall be the offeror's responsibility to provide such in a timely manner. Failure to adequately provide sufficient information in a timely manner prior to the bid shall result in rejection of the product.

The Director will issue an addendum upon certification of any Hawaii products for this Bid. The Director will also notify the SPO of the approved *Certification for Hawaii Product Preference* for inclusion on its Hawaii Products List. If a product is disapproved by the Director, he will notify the offeror in writing of his determination.

The provider of any certified Hawaii Product is solely responsible to notify the Director of any change(s) in the availability of its product(s). The Director shall then notify the SPO of any such changes for amendment of the Hawaii Product List, if applicable.

All information submitted in the Certification for Hawaii Product Preference form shall be treated as confidential.

The SPO is responsible to reestablish and maintain the Hawaii Products List on its website and shall update the list when new products are approved or when notified of changes to products already on its list.

Offeror's attention is directed to the Special Provisions, Section 10 (Preferences), Subsection A (Preference for Hawaii Products).

PERFORMANCE BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(full legal name and street address of Contractor)

as Contractor, hereinafter called Principal, and _____,
(name and street address of bonding company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawai'i, are held and firmly bound unto the COUNTY OF HAWAI'I, a municipal corporation duly organized and existing under the laws of the State of Hawai'i, its successors and assigns, hereinafter called Obligee, in the amount of

AND NO/100 DOLLARS (\$ _____),

to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on _____, for the following project: West Hawai'i Sanitary Landfill Gas Collection and Control System Expansion at Cells 9,10 and 11, Job No. SW-4543, Pu'uanaulu, North Kona, Hawai'i,

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in strict accordance with the terms of the Contract as said Contract may be modified or amended from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Obligee to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Obligee in satisfaction of the surety's performance obligation on this bond.

Signed this _____ day of _____ , _____ .

(Seal)

Name of Principal (Contractor)

Signature

Title

(Seal)

Name of Surety

Signature

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(full legal name and street address of Contractor)

as Contractor, hereinafter called Principal, and _____,
(name and street address of bonding company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawai'i, are held and firmly bound unto the County of Hawai'i, a Municipal corporation duly organized and existing under the laws of the State of Hawai'i, its successors and assigns, hereinafter called Obligee, in the amount of _____

AND NO/100 DOLLARS (\$ _____),

to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on _____, for the following project: West Hawai'i Sanitary Landfill Gas Collection and Control System Expansion at Cells 9, 10 and 11, Job No. SW-4543, Pu'uana'hulu, North Kona, Hawai'i,

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawai'i Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this _____ day of _____ , .

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

MINIMUM WAGE SCHEDULE

In accordance with Chapter 104, Hawaii Revised Statutes, various classes of laborers and mechanics engaged in the performance of this contract on the job site shall be entitled to any increase in prevailing wage rates as promulgated by the Department of Labor and Industrial Relations.

At the time any subcontracts are made, the Contractor shall inform the Director of Labor and Industrial Relations of the names and addresses of the Subcontractors.

The Contractor and Subcontractors shall maintain accurate and complete payroll records during the course of the work containing the name and address of each laborer or mechanic engaged in the performance of the Contract at the job site, his job classification, hourly wage rate, daily and weekly hours worked, straight time and overtime pay earned, deductions made, and actual weekly wages paid.

Payroll records shall be preserved for a period of three (3) years.

The Contractor shall submit an original and one (1) copy of this payroll to this office at least once a week, or as prescribed by the Engineer.

The enclosed schedule of wage rates is recognized by the Director of Labor and Industrial Relations to be prevailing on public construction work for the purposes of Chapter 104, Hawaii Revised Statutes. ALL RATES ARE SUBJECT TO CHANGE. A copy of this wage schedule shall be posted on the job.

Revised 11/20/00

State of Hawai'i
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
Princess Ruth Ke'elikolani Building
830 Punchbowl Street
Honolulu, Hawai'i 96813

September 16, 2019
WAGE RATE SCHEDULE BULLETIN NO. 496

This schedule of wage rates contained herein is recognized by the Director of Labor and Industrial Relations to be prevailing on public construction work for the purposes of Chapter 104, Hawai'i Revised Statutes. The schedule of wage rates determines the applicable wage determination for each classification and does not impose any staffing requirements for any classification. The schedule of wage rates is applicable only to those laborers and mechanics employed at the site of work.

As required by law, future wage rates for laborers and mechanics are incorporated into this bulletin based on available information and are subject to change. Whenever the Director determines that the prevailing wage has increased as shown in the wage rate schedule, the contractor must increase the wages accordingly during the performance of the contract. For addenda or additional wage rate schedules, please consult the Internet at <http://labor.hawaii.gov/rs>.

The Apprentice Schedule is available on the Internet or upon request from the Research and Statistics Office. Pursuant to Section 12-22-6 (1), Hawai'i Administrative Rules, the Apprentice Schedule is applicable only to apprentices who are parties to apprenticeship agreements registered with or recognized by the Department of Labor and Industrial Relations.

Questions on the schedule should be referred to the Research and Statistics Office at (808) 586-9005.

The next regular schedule will be issued on or about February 15, 2020.

SCOTT T. MURAKAMI
Director



STATE OF HAWAII
DAVID Y. IGE, Governor

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
SCOTT T. MURAKAMI, Director
LEONARD HOSHIJO, Deputy Director

RESEARCH AND STATISTICS OFFICE
PHYLLIS DAYAO, Research & Statistics Officer

OPERATIONS MANAGEMENT INFORMATION STAFF
Janet Kaya, Supervisor
Elienne Yoshida, Research Statistician

In cooperation with:
WAGE STANDARDS DIVISION
PAMELA MARTIN, Administrator

Note: Revision to Wage Rate Schedule Bulletin No. 494 February 18, 2019

Job Title Revision: Light Clean-up (Janitorial) Laborer should be:
Light/Final Clean-up (Janitorial) Laborer.

WAGE RATE SCHEDULE BULLETIN NO. 496

| Classification | Current | | | 2020 | | | 2021 | | | 2022 | | | Remarks See Pg 6-8 |
|--|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|--------------------------|
| | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | |
| * ASPHALT PAVING GROUP: | 9/16/19 | | | | | | | | | | | | |
| Asphalt Concrete Material Transfer | \$78.29 | \$44.42 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Asphalt Raker | \$77.33 | \$43.46 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Asphalt Spreader Operator | \$78.81 | \$44.94 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Laborer, Hand Roller | \$74.56 | \$40.69 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Roller Operator (5 tons and under) | \$77.06 | \$43.19 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Roller Operator (over 5 tons) | \$78.49 | \$44.62 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Screed Person | \$78.29 | \$44.42 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| EQUIPMENT OPERATOR: | | | | | | | | | | | | | |
| Combination Loader/Backhoe (over 3/4 cu. yd.) | \$77.33 | \$43.46 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Combination Loader/Backhoe (up to 3/4 cu. yd.) | \$76.35 | \$42.48 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Concrete saws and/or Grinder (self-propelled unit on streets, highways, airports and canals) | \$78.29 | \$44.42 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Grader, Soil Stabilizer, Cold Planer | \$79.12 | \$45.25 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Loader (2-1/2 cu. yds. and under) | \$78.29 | \$44.42 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Loader (over 2-1/2 cu. yds. to and including 5 cu. yds.) | \$78.61 | \$44.74 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| TRUCK DRIVER: | | | | | | | | | | | | | |
| Assistant to Engineer | \$77.06 | \$43.19 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Oil Tanker (double), Hot Liquid Asphalt Tanker | \$78.61 | \$44.74 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Semi-Trailer, Semi-Dump, Asphalt Distributor | \$78.29 | \$44.42 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Slip-in or Pup | \$78.61 | \$44.74 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Single or Rock Cans Tandem Dump Truck (8 cu. yds. & under, water level) | \$77.33 | \$43.46 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Single or Rock Cans Tandem Dump Truck (over 8 cu. yds., water level) | \$77.64 | \$43.77 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Tractor Trailer (hauling equipment) | \$78.72 | \$44.85 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| Utility, Flatbed | \$77.06 | \$43.19 | \$33.87 | - | - | - | - | - | - | - | - | - | 13 |
| BOILERMAKER | 2/18/19 | | | | | | | | | | | | |
| | \$67.33 | \$36.33 | \$31.00 | - | - | - | - | - | - | - | - | - | 13 |
| * CARPENTER: | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| Carpenter; Patent Scaffold Erector (14 feet and over); | | | | | | | | | | | | | |
| Piledriver; Pneumatic Nailer | \$72.35 | \$49.95 | \$22.40 | \$73.79 | \$50.50 | \$23.29 | \$75.54 | \$51.25 | \$24.29 | \$77.29 | \$52.00 | \$25.29 | 1,12,13 |
| Millwright | \$72.60 | \$50.20 | \$22.40 | \$74.04 | \$50.75 | \$23.29 | \$75.79 | \$51.50 | \$24.29 | \$77.54 | \$52.25 | \$25.29 | 1,12,13 |
| Power Saw Operator (2 h.p. & above) | \$72.50 | \$50.10 | \$22.40 | \$73.94 | \$50.65 | \$23.29 | \$75.69 | \$51.40 | \$24.29 | \$77.44 | \$52.15 | \$25.29 | 1,12,13 |
| * CEMENT FINISHER: | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| Cement Finisher; Curb Setter; Precast Panel Setter; | | | | | | | | | | | | | |
| Manhole Builder | \$71.78 | \$41.10 | \$30.68 | \$73.63 | \$42.10 | \$31.53 | \$74.98 | \$42.60 | \$32.38 | \$76.46 | \$43.33 | \$33.13 | 2,12,13 |
| Trowel Machine Operator | \$71.93 | \$41.25 | \$30.68 | \$73.78 | \$42.25 | \$31.53 | \$75.13 | \$42.75 | \$32.38 | \$76.61 | \$43.48 | \$33.13 | 2,12,13 |
| CHAIN-LINK FENCE ERECTOR | 10/1/18 | | | | | | | | | | | | |
| | \$38.75 | \$24.00 | \$14.75 | - | - | - | - | - | - | - | - | - | 10,13 |
| * CHLORINATOR | 9/16/19 | | | | | | | | | | | | |
| | \$28.84 | \$28.84 | - | - | - | - | - | - | - | - | - | - | |

WAGE RATE SCHEDULE BULLETIN NO. 496

| Classification | Current | | | 2020 | | | 2021 | | | 2022 | | | Remarks See Pg 6-8 |
|--|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|--------------------------|
| | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | |
| * DIVER: | 9/16/19 | | | | | | | | | | | | |
| Diver (Aqua Lung) (Scuba) - Up to a depth of 30 feet | \$91.44 | \$58.13 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Diver (Aqua Lung) (Scuba) - Over a depth of 30 feet | \$100.81 | \$67.50 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Stand-By Diver (Aqua Lung) (Scuba) | \$82.06 | \$48.75 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Diver (Other than Aqua Lung) | \$100.81 | \$67.50 | \$33.31 | - | - | - | - | - | - | - | - | - | 3,13 |
| Stand-By Diver (Other than Aqua Lung) | \$82.06 | \$48.75 | \$33.31 | - | - | - | - | - | - | - | - | - | 3,13 |
| Tender (Other than Aqua Lung) | \$79.03 | \$45.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| * DRAPERY INSTALLER | 9/16/19 | | | | | | | | | | | | |
| | \$33.11 | \$31.00 | \$2.11 | - | - | - | - | - | - | - | - | - | |
| * DRYWALL INSTALLER | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| | \$72.60 | \$50.20 | \$22.40 | \$74.04 | \$50.75 | \$23.29 | \$75.79 | \$51.50 | \$24.29 | \$77.54 | \$52.25 | \$25.29 | 12,13 |
| DRYWALL TAPERS/FINISHERS | 2/18/19 | | | | | | | | | | | | |
| | \$70.75 | \$42.60 | \$28.15 | - | - | - | - | - | - | - | - | - | |
| ELECTRICIAN | 8/25/19 | | | 2/23/20 | | | | | | | | | |
| Cable Splicer (inside/outside) | \$85.48 | \$55.88 | \$29.60 | \$86.17 | \$56.43 | \$29.74 | - | - | - | - | - | - | 4,13 |
| Ground Worker (outside) | \$62.87 | \$38.10 | \$24.77 | \$63.36 | \$38.48 | \$24.88 | - | - | - | - | - | - | 4,13 |
| Heavy Equipment Operator (outside) | \$72.56 | \$45.72 | \$26.84 | \$73.13 | \$46.17 | \$26.96 | - | - | - | - | - | - | 4,13 |
| Line Installer (outside); Wire Installer (inside) | \$79.01 | \$50.80 | \$28.21 | \$79.66 | \$51.30 | \$28.36 | - | - | - | - | - | - | 4,13 |
| * Telecommunication Worker | 8/25/19 | | | 8/23/20 | | | 8/22/21 | | | 8/21/22 | | | |
| Licensed Technician | \$44.18 | \$31.69 | \$12.49 | \$45.65 | \$32.69 | \$12.96 | \$46.82 | \$33.69 | \$13.13 | \$48.63 | \$34.94 | \$13.69 | 13 |
| Technician I / Splicer | \$42.32 | \$30.11 | \$12.21 | \$43.74 | \$31.06 | \$12.68 | \$44.85 | \$32.01 | \$12.84 | \$46.57 | \$33.19 | \$13.38 | 13 |
| ELEVATOR CONSTRUCTOR MECHANIC | 2/18/19 | | | | | | | | | | | | |
| | \$92.905 | \$59.20 | \$33.705 | - | - | - | - | - | - | - | - | - | 13 |
| * EQUIPMENT OPERATOR: | 9/16/19 | | | | | | | | | | | | |
| Group 1 | \$76.75 | \$43.44 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 2 | \$76.86 | \$43.55 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 3 | \$77.03 | \$43.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 4 | \$77.30 | \$43.99 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 5 | \$77.61 | \$44.30 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 6 | \$78.26 | \$44.95 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 7 | \$78.58 | \$45.27 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 8 | \$78.69 | \$45.38 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 9 | \$78.80 | \$45.49 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 9A | \$79.03 | \$45.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 10 | \$79.09 | \$45.78 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 10A | \$79.24 | \$45.93 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 11 | \$79.39 | \$46.08 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 12 | \$79.75 | \$46.44 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |
| Group 12A | \$80.11 | \$46.80 | \$33.31 | - | - | - | - | - | - | - | - | - | 5,13 |

WAGE RATE SCHEDULE BULLETIN NO. 496

| | Current | | | 2020 | | | 2021 | | | 2022 | | | |
|---|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|--------------------------|
| Classification | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Remarks See Pg 6-8 |
| | | | | | | | | | | | | | |
| FENCE ERECTOR (CHAIN-LINK TYPE) | | | | | | | | | | | | | |
| See Chain-Link Fence Erector | - | - | - | - | - | - | - | - | - | - | - | - | |
| * FLOOR LAYER (CARPET, LINOLEUM & SOFT TILE) | 9/16/19 | | | 3/1/20 | | | 2/28/21 | | | 2/27/22 | | | |
| | \$65.46 | \$35.40 | \$30.06 | \$67.70 | \$36.65 | \$31.05 | \$69.69 | \$37.90 | \$31.79 | \$71.93 | \$39.15 | \$32.78 | 13 |
| * GLAZIER | 9/16/19 | | | | | | | | | | | | |
| | \$72.25 | \$39.00 | \$33.25 | - | - | - | - | - | - | - | - | - | 6,13 |
| * HELICOPTER WORK: | 9/16/19 | | | | | | | | | | | | |
| Airborne Hoist Operator | \$80.61 | \$47.30 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Co-Pilot | \$80.75 | \$47.44 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Pilot | \$80.92 | \$47.61 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| * INSULATOR | 9/16/19 | | | 8/30/20 | | | | | | | | | |
| | \$66.15 | \$40.90 | \$25.25 | \$67.55 | \$41.90 | \$25.65 | - | - | - | - | - | - | 7,13 |
| * IRONWORKER: | 9/16/19 | | | 9/1/20 | | | 9/1/21 | | | | | | |
| Reinforcing, Structural | \$76.55 | \$41.50 | \$35.05 | \$76.55 | \$41.50 | \$35.05 | \$76.55 | \$41.50 | \$35.05 | - | - | - | 8,13 |
| * LABORER: | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| Driller | \$60.52 | \$39.05 | \$21.47 | \$62.38 | \$39.70 | \$22.68 | \$63.84 | \$40.35 | \$23.49 | \$65.25 | \$41.00 | \$24.25 | 1,13 |
| Guniting Operator or Shotcrete Operator | \$60.02 | \$38.55 | \$21.47 | \$61.88 | \$39.20 | \$22.68 | \$63.34 | \$39.85 | \$23.49 | \$64.75 | \$40.50 | \$24.25 | 1,13 |
| High Scaler (Working Suspended) | \$60.02 | \$38.55 | \$21.47 | \$61.88 | \$39.20 | \$22.68 | \$63.34 | \$39.85 | \$23.49 | \$64.75 | \$40.50 | \$24.25 | 13 |
| Laborer I | \$59.52 | \$38.05 | \$21.47 | \$61.38 | \$38.70 | \$22.68 | \$62.84 | \$39.35 | \$23.49 | \$64.25 | \$40.00 | \$24.25 | 1,13 |
| Laborer II | \$56.92 | \$35.45 | \$21.47 | \$58.78 | \$36.10 | \$22.68 | \$60.24 | \$36.75 | \$23.49 | \$61.65 | \$37.40 | \$24.25 | 1,13 |
| Light/Final Clean-up (Janitorial) Laborer | \$46.42 | \$29.25 | \$17.17 | \$47.82 | \$29.65 | \$18.17 | \$48.92 | \$30.05 | \$18.87 | \$50.02 | \$30.45 | \$19.57 | 1,13 |
| Mason Tender/Hod Carrier | \$60.02 | \$38.55 | \$21.47 | \$61.88 | \$39.20 | \$22.68 | \$63.34 | \$39.85 | \$23.49 | \$64.75 | \$40.50 | \$24.25 | 1,13 |
| Powder Blaster | \$60.52 | \$39.05 | \$21.47 | \$62.38 | \$39.70 | \$22.68 | \$63.84 | \$40.35 | \$23.49 | \$65.25 | \$41.00 | \$24.25 | 1,13 |
| Window Washer (Outside) (On bosun's chair, cable-suspended scaffold or work platform) | \$59.02 | \$37.55 | \$21.47 | \$60.88 | \$38.20 | \$22.68 | \$62.34 | \$38.85 | \$23.49 | \$63.75 | \$39.50 | \$24.25 | 13 |
| LANDSCAPER: | 9/2/19 | | | | | | | | | | | | |
| Landscape & Irrigation Laborer A | \$39.60 | \$26.15 | \$13.45 | - | - | - | - | - | - | - | - | - | |
| Landscape & Irrigation Laborer B | \$40.60 | \$27.15 | \$13.45 | - | - | - | - | - | - | - | - | - | |
| Landscape & Irrigation Maintenance Laborer | \$35.00 | \$21.55 | \$13.45 | - | - | - | - | - | - | - | - | - | |
| * LATHER | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| | \$72.60 | \$50.20 | \$22.40 | \$74.04 | \$50.75 | \$23.29 | \$75.79 | \$51.50 | \$24.29 | \$77.54 | \$52.25 | \$25.29 | 12,13 |
| * MASON; Bricklayer; | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| Cement Blocklayer; Stone Mason; Precast Sill Setter | \$72.93 | \$44.96 | \$27.97 | \$74.79 | \$45.96 | \$28.83 | \$76.14 | \$46.46 | \$29.68 | \$77.67 | \$47.24 | \$30.43 | 2,13 |
| Pointer-Caulker-Weatherproofer | \$73.18 | \$45.21 | \$27.97 | \$75.04 | \$46.21 | \$28.83 | \$76.39 | \$46.71 | \$29.68 | \$77.92 | \$47.49 | \$30.43 | 2,13 |
| * PAINTER: (Note: 2 increases for 2020 & 2021) | 7/1/19 | | | 1/1/20 | | | 1/1/21 | | | | | | |
| Painter; Spray Painter; Sandblaster or Waterblaster; Thermoplastic Striper; Paper Hanger | \$67.74 | \$38.35 | \$29.39 | \$68.44 | \$38.80 | \$29.64 | \$68.44 | \$38.80 | \$29.64 | - | - | - | 12 |
| | | | | 7/1/20 | | | 7/1/21 | | | | | | |
| Painter; Spray Painter; Sandblaster or Waterblaster Thermoplastic Striper; Paper Hanger | - | - | - | \$68.44 | \$38.80 | \$29.64 | \$68.44 | \$38.80 | \$29.64 | - | - | - | 12 |

WAGE RATE SCHEDULE BULLETIN NO. 496

| Classification | Current | | | 2020 | | | 2021 | | | 2022 | | | Remarks See Pg 6-8 |
|---|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|--------------------------|
| | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | |
| * PLASTERER: | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| | \$73.32 | \$42.64 | \$30.68 | \$75.22 | \$43.69 | \$31.53 | \$76.59 | \$44.21 | \$32.38 | \$78.13 | \$45.00 | \$33.13 | 2,13 |
| * PLUMBER: (Note: 2 increases for 2020) | 7/7/19 | | | 1/5/20 | | | 1/3/21 | | | | | | |
| Plumber; Pipefitter; Refrigeration Fitter; Heating & Air Conditioning Fitter; Sprinkler Fitter; Steamfitter | \$70.34 | \$43.85 | \$26.49 | \$71.06 | \$44.35 | \$26.71 | \$72.43 | \$45.35 | \$27.08 | - | - | - | 9,13 |
| | | | | 7/5/20 | | | | | | | | | |
| Plumber; Pipefitter; Refrigeration Fitter; Heating & Air Conditioning Fitter; Sprinkler Fitter; Steamfitter | - | - | - | \$71.81 | \$44.85 | \$26.96 | - | - | - | | | | 9,13 |
| * ROOFER: | 9/16/19 | | | 9/6/20 | | | 9/5/21 | | | | | | |
| Shingle, Tile, Built-up Roofing | \$60.10 | \$41.15 | \$18.95 | \$60.85 | \$41.80 | \$19.05 | \$61.70 | \$42.55 | \$19.15 | - | - | - | 12 |
| Coal Tar Pitch | \$101.25 | \$82.30 | \$18.95 | \$102.65 | \$83.60 | \$19.05 | \$104.25 | \$85.10 | \$19.15 | - | - | - | |
| SANDBLASTER OR WATERBLASTER: | | | | | | | | | | | | | |
| Use wages of craft to which sand or water blasting is incidental. | | | | | | | | | | | | | |
| SHEETMETAL WORKER: | 9/1/19 | | | | | | | | | | | | |
| | \$71.23 | \$43.13 | \$28.10 | - | - | - | - | - | - | - | - | - | 13 |
| | | | | - | - | - | - | - | - | - | - | - | |
| * TERMITE TREATER | 9/16/19 | | | | | | | | | | | | |
| | \$20.53 | \$18.60 | \$1.93 | - | - | - | - | - | - | - | - | - | |
| TERRAZZO: | 9/3/18 | | | | | | | | | | | | |
| Terrazzo Setter | \$70.52 | \$41.70 | \$28.82 | - | - | - | - | - | - | - | - | - | 2,13 |
| Terrazzo Base Grinder | \$68.71 | \$39.89 | \$28.82 | - | - | - | - | - | - | - | - | - | 2,13 |
| Certified Terrazzo Floor Grinder and Tender | \$67.16 | \$38.34 | \$28.82 | - | - | - | - | - | - | - | - | - | 2,13 |
| Terrazzo Floor Grinder | \$64.16 | \$35.34 | \$28.82 | - | - | - | - | - | - | - | - | - | 2,13 |
| TILE SETTER: | 9/3/18 | | | | | | | | | | | | |
| Ceramic Hard Tile; Marble Setter | \$70.52 | \$41.70 | \$28.82 | - | - | - | - | - | - | - | - | - | 2,13 |
| Certified Ceramic Tile & Marble Helper | \$67.16 | \$38.34 | \$28.82 | - | - | - | - | - | - | - | - | - | 2,13 |
| * TRUCK DRIVER: | 9/16/19 | | | | | | | | | | | | |
| Concrete Mixer | \$36.37 | \$30.95 | \$5.42 | - | - | - | - | - | - | - | - | - | |
| Concrete Mixer/Booster | \$48.63 | \$34.53 | \$14.10 | - | - | - | - | - | - | - | - | - | |
| Dump Truck, 8 cu. yds. & under (water level); Water Truck (up to & including 2,000 gallons) | \$77.30 | \$43.99 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Flatbed, Utility, etc. | \$77.03 | \$43.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| End Dump, Unlicensed (Euclid, Mack, Caterpillar, or similar); Tractor Trailer (hauling equipment) | \$78.69 | \$45.38 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Semi-Trailer, Rock Cans, or Semi-Dump | \$78.26 | \$44.95 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Slip-in or Pup | \$78.58 | \$45.27 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Tandem Dump Truck, over 8 cu. yds. (water level); Water Truck (over 2,000 gallons) | \$77.61 | \$44.30 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |

WAGE RATE SCHEDULE BULLETIN NO. 496

| Classification | Current | | | 2020 | | | 2021 | | | 2022 | | | Remarks See Pg 6-8 |
|--|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|-----------------------------|-------------------------|--------------------------|--------------------------|
| | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | Prevailing Wage Total | Basic Hourly Rate | Fringe Hourly Rate | |
| * UNDERGROUND LABORER: | 9/16/19 | | | 8/31/20 | | | 8/30/21 | | | 9/5/22 | | | |
| Worker in a raise, shaft, or tunnel. | | | | | | | | | | | | | |
| Group 1 | \$60.12 | \$38.65 | \$21.47 | \$61.98 | \$39.30 | \$22.68 | \$63.44 | \$39.95 | \$23.49 | \$64.85 | \$40.60 | \$24.25 | 13 |
| Group 2 | \$61.62 | \$40.15 | \$21.47 | \$63.48 | \$40.80 | \$22.68 | \$64.94 | \$41.45 | \$23.49 | \$66.35 | \$42.10 | \$24.25 | 13 |
| Group 3 | \$62.12 | \$40.65 | \$21.47 | \$63.98 | \$41.30 | \$22.68 | \$65.44 | \$41.95 | \$23.49 | \$66.85 | \$42.60 | \$24.25 | 13 |
| Group 4 | \$63.12 | \$41.65 | \$21.47 | \$64.98 | \$42.30 | \$22.68 | \$66.44 | \$42.95 | \$23.49 | \$67.85 | \$43.60 | \$24.25 | 13 |
| Group 5 | \$63.37 | \$41.90 | \$21.47 | \$65.23 | \$42.55 | \$22.68 | \$66.69 | \$43.20 | \$23.49 | \$68.10 | \$43.85 | \$24.25 | 13 |
| Group 6 | \$63.47 | \$42.00 | \$21.47 | \$65.33 | \$42.65 | \$22.68 | \$66.79 | \$43.30 | \$23.49 | \$68.20 | \$43.95 | \$24.25 | 13 |
| Group 7 | \$63.72 | \$42.25 | \$21.47 | \$65.58 | \$42.90 | \$22.68 | \$67.04 | \$43.55 | \$23.49 | \$68.45 | \$44.20 | \$24.25 | 13 |
| Group 8 | \$64.17 | \$42.70 | \$21.47 | \$66.03 | \$43.35 | \$22.68 | \$67.49 | \$44.00 | \$23.49 | \$68.90 | \$44.65 | \$24.25 | 13 |
| * WATER FRONT CONSTRUCTION (DREDGING): | 9/16/19 | | | | | | | | | | | | |
| CLAMSHELL OR DIPPER DREDGES: | | | | | | | | | | | | | |
| Clamshell or Dipper Operator | \$81.75 | \$48.44 | \$33.31 | - | - | - | - | - | - | - | - | - | 11,13 |
| Mechanic; Welder; Watch Engineer | \$79.09 | \$45.78 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Deckmate; Bargemate | \$78.69 | \$45.38 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Fire Person; Oiler; Deckhand; Barge Worker | \$77.03 | \$43.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| HYDRAULIC SUCTION DREDGES: | | | | | | | | | | | | | |
| Lever Operator | \$79.39 | \$46.08 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Mechanic; Welder | \$79.09 | \$45.78 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Watch Engineer (steam or electric) | \$79.24 | \$45.93 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Dozer Operator | \$79.03 | \$45.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Deckmate | \$78.69 | \$45.38 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Winch Operator (stern winch on dredge) | \$78.58 | \$45.27 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Fire Person; Oiler; Deckhand (can operate anchor scow under direction of deckmate); Levee Operator | \$77.03 | \$43.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| DERRICKS: | | | | | | | | | | | | | |
| Operator: Derrick, Piledriver, Crane | \$79.75 | \$46.44 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Deckmate; Saurman Type Dragline (up to & including 5 yds.) | \$78.69 | \$45.38 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Saurman Type Dragline (over 5 cu. yds.) | \$79.09 | \$45.78 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Fire Person; Oiler; Deckhand | \$77.03 | \$43.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| BOAT OPERATORS: | | | | | | | | | | | | | |
| Master Boat Operator | \$79.39 | \$46.08 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Boat Operator | \$79.24 | \$45.93 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| Boat Deckhand | \$77.03 | \$43.72 | \$33.31 | - | - | - | - | - | - | - | - | - | 13 |
| * WATER WELL DRILLER: | 9/16/19 | | | | | | | | | | | | |
| Water Well Driller | \$46.40 | \$35.00 | \$11.40 | - | - | - | - | - | - | - | - | - | |
| Water Well Driller Helper | \$32.38 | \$22.00 | \$10.38 | - | - | - | - | - | - | - | - | - | |
| WELDER: | | | | | | | | | | | | | |
| Use wages of craft to which welding is incidental, except for Chain-Link Fence Erector. See remark. | | | | | | | | | | | | | 10 |
| * WINDOW FILM INSTALLER | 9/16/19 | | | | | | | | | | | | |
| | \$23.38 | \$22.62 | \$0.76 | - | - | - | - | - | - | - | - | - | |

Comments: Overtime must be paid at one and one-half times the basic hourly rate plus the hourly cost of required fringe benefits.

* Indicates a wage, fringe benefit, remark, or title change from the previous bulletin.

REMARKS:

1. Carpenter, Laborer (excluding High Scaler, Window Washer): \$.50 per hour shall be added to the regular straight-time rate for height pay for each hour while working from a bosun's chair and/or from a cable-suspended scaffold or work platform which is free swinging (not attached to building) for each hour worked on said rig.
2. Cement Finisher, Mason, Plasterer, Terrazzo, Tile Setter: \$1.00 per hour shall be added to the regular straight-time rate for height pay for each hour while working from a bosun's chair and/or from a cable-suspended scaffold or work platform which is free swinging (not attached to building) for each hour worked on said rig.
3. Diver (Other than Aqua Lung), Stand-By Diver (Other than Aqua Lung):
 - A. On any dive exceeding 50 feet, the diver shall, in addition, be paid the following amount of "depth money":

| | |
|----------------------|---|
| 50 feet to 100 feet | \$1.50 per foot in excess of 50 feet |
| 100 feet to 150 feet | \$100.00 plus \$2.00 per foot in excess of 100 feet |
| 150 feet to 200 feet | \$200.00 plus \$3.00 per foot in excess of 150 feet |
 - B. When it is necessary for a Diver to enter any pipe, tunnel or other enclosure, the said Diver shall, in addition to the hourly rate, receive a premium in accordance with the following schedule for distance traveled from the entrance of the pipe, tunnel or other enclosure:
 - 1) When able to stand erect, but in which there is no vertical ascent:

| | |
|-----------------------|--|
| 5 feet to 50 feet | \$5.00 per day |
| 50 feet to 100 feet | \$7.50 per day |
| 100 feet to 150 feet | \$12.50 per day |
| Greater than 150 feet | The premium shall be increased an additional \$7.50 for each succeeding 50 feet. |
 - 2) When unable to stand erect and in which there is no vertical ascent:

| | |
|----------------------|-----------------|
| 5 feet to 50 feet | \$5.00 per day |
| 50 feet to 100 feet | \$7.50 per day |
| 100 feet to 150 feet | \$12.50 per day |
| 150 feet to 200 feet | \$36.75 per day |
| 200 feet to 300 feet | \$1.00 per foot |
| 300 feet to 450 feet | \$1.50 per foot |
| 450 feet to 600 feet | \$2.50 per foot |
4. Electrician:
 - A. One and one-half times the straight-time rate while working in a tunnel under construction; under water with aqualung equipment; in a completed tunnel which has only one entrance or exit providing access to safety and where no other personnel are working; or in an underground structure having no access to safety or where no other personnel are working.
 - B. Double the straight-time rate shall be paid for the following types of hazardous work regardless if fall prevention devices are used:
 - 1) While working from poles, trusses, stacks, towers, tanks, bosun's chairs, swinging or rolling scaffolds, supporting structures, and open platforms, over 70 feet from the ground where the employee is subject to a free fall; provided, however, that when work is performed on stacks, towers or permanent platforms where the employees are on a firm footing within an enclosure, a hazardous condition does not exist regardless of height;
 - 2) While working outside of a railing or enclosure, or temporary platforms extending outside of a building, or from scaffolding or ladder within an enclosure where an employee's footing is within one foot of the top of such railing, and the employee is subject to a free fall of over 70 feet;
 - 3) Working on buildings while leaning over the railing or edge of the building, and is subject to a free fall of 70 feet; or
 - 4) Two hours minimum hazardous pay per day shall be paid while climbing to a stack, tower or permanent platform which exceeds 70 feet from the ground but where the employee is on a firm footing within an enclosure.
 - C. Five percent per hour shall be added to the hourly wage for height pay while working above 9,000 feet elevation.

REMARKS:

5. Equipment Operator:

- A. Operators and Assistants to Engineer (climbing a boom) of cranes (under 50 tons) with booms of eighty feet or more (including jib) or of cranes (under 50 tons) with leads of one hundred feet or more, shall receive additional premium according to the following schedule:

| | Per Hour |
|--|----------|
| Booms of 80 feet up to, or leads of 100 feet up to, but not including 130 feet | \$0.50 |
| Booms and/or leads of 130 feet up to, but not including 180 feet | \$0.75 |
| Booms and/or leads of 180 feet up to and including 250 feet | \$1.15 |
| Booms and/or leads over 250 feet | \$1.50 |

Operators and Assistants to Engineer (climbing a boom) of cranes (50 tons and over) with booms of 180 feet or more (including jib) shall receive additional premium according to the following schedule:

| | Per Hour |
|--|----------|
| Booms of 180 feet up to and including 250 feet | \$1.25 |
| Booms over 250 feet | \$1.75 |

Note: The boom shall be measured from the center of the heel pin to the center of the boom or jib point sheave.

- B. \$1.25 per hour shall be added to the hourly wage while operating a rig suspended by ropes or cables or to perform work on a Yo-Yo Cat.
- C. In a raise or shaft, a premium of \$.40 per hour will be paid in addition to the regular straight time wage.
 A raise is defined to be an underground excavation (lined or unlined) whose length exceeds its width and the inclination of the grade from the excavation is greater than 20 degrees from the horizontal.
 A shaft is defined to be an excavation (lined or unlined) made from the surface of the earth, generally vertical in nature, but may decline up to 75 degrees from the vertical, and whose depth is greater than 15 feet and its largest horizontal dimension. Includes an underground silo.
- D. In a tunnel, a premium of \$.30 per hour will be paid in addition to the regular straight time wages.
 A tunnel is defined to be an underground excavation (lined or unlined) whose length exceeds its width and the inclination of the grade from the excavation is no greater than 20 degrees from the horizontal.
6. Glazier: \$1.00 per hour shall be added to the hourly wage for height pay for exterior glazing work performed in a walking/working surface with an unprotected side or edge 10 feet or more above a lower level which requires protection from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, position devise systems, fall restraint systems, perimeter safety cables or controlled decking zones.
7. Insulator: Six percent per hour shall be added to the hourly wage for hazardous pay while working from a boatswain chair, staging or free standing scaffolding erected from the ground up or mezzanine floor subject to a free fall and skydlimber suspended from a permanent structure and when working above 40 feet.
8. Ironworker: \$.50 per hour shall be added to the hourly wage while working in tunnels or coffer dams. \$1.00 per hour shall be added to the hourly wage while working under or covered with water (submerged), or on the summits of Mauna Kea, Mauna Loa or Haleakala.
9. Plumber: One and one-half times the straight-time rate for height pay while working from OSHA approved trusses, stacks, towers, tanks, bosun's chair, swinging or rolling scaffolding, supporting structures or on open platforms where the employee is subject to a direct fall of 40 feet or more. Provided, however, that when said work is performed where the employee is on a firm footing within an enclosure, a hazardous condition does not exist regardless of height. \$1.00 per hour shall be added to the straight-time rate while working with flame cutting or any type of welding equipment on any galvanized material or product for at least an hour.
10. Chain-Link Fence Erector: \$1.00 per hour shall be added to the hourly wage while performing welding services.
11. Water Front Construction: Clamshell or Dipper Operator: \$.50 per hour shall be added to the straight-time rate while working with boom (including jib) over 130 feet.
12. Possible wage/fringe option increases:
 Carpenter, Drywall Installer, Lather: Effective WRS: 8/31/20 - \$0.25; 8/30/21 - \$0.25; 9/5/22 - \$0.50
 Cement Finisher & Plasterer: Effective WRS: 8/23/20 - \$0.30; 8/30/21 - \$0.30; 9/5/22 - \$0.30
 Mason; Bricklayer, Cement Blocklayer; Stone Mason; Precast Sill Setter Pointer-Caulker-Weatherproofer: Effective WRS: 8/31/20 - \$0.30; 8/30/21 - \$0.30; 9/5/22 - \$0.30
 Painter: Effective WRS #497: 1/1/20 - \$0.65; WRS: 7/1/20 - \$0.65; 1/1/21 - \$0.50; 7/1/21 - \$0.48
 Roofer: Effective WRS: 9/6/20 - \$0.80; 9/5/21 - \$0.80

REMARKS:

13. Overtime/Holiday must be paid at one and one-half times the basic hourly rate, plus the hourly cost of required fringe, with the following exceptions:

A. Two times the basic hourly rate, plus the hourly cost of required fringe.

Asphalt Paving: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Boilermaker: Sunday, New Year's Day, President's Day, Memorial Day, Kamehameha Day, July 4th, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Diver: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Electrician: Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

Elevator Constructor: Saturday, Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Equipment Operator: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Floor Layer: Labor Day.

Glazier: Sunday.

Helicopter Worker: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Ironworker: Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Plumber: Sunday, New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Kamehameha Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Sheetmetal Worker: Sunday, New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Kamehameha Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Telecommunication: Sunday, New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Truck Driver, except Concrete Mixer & Concrete Mixer/Booster: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Water Front Construction (Dredging): Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

B. Three times the basic hourly wage, plus the hourly cost of required fringe on Labor Day.

Carpenter
Cement Finisher
Chain Link Fence Erector
Drywall Installer
Insulator
Laborer
Lather
Mason
Plasterer
Terrazzo
Tile Setter
Underground Laborer

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | Interval Hrs | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|-----------------------------------|-----------------|-------------------|---------|---------|---------|---------|---------|---------|---------|-----|------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| BOILERMAKER | 1000 | \$25.43 | \$27.25 | \$29.06 | \$30.88 | \$32.70 | \$34.51 | | | | | \$30.72 | 10 |
| * CARPENTER | | | | | | | | | | | | | |
| Indentured After 9/1/02 | 1000 | \$19.98 | | | | | | | | | | \$8.62 | 1,10 |
| " | 1000 | | \$22.48 | | | | | | | | | \$12.15 | 1,10 |
| " | 1000 | | | \$24.98 | \$29.97 | | | | | | | \$15.25 | 1,10 |
| " | 1000 | | | | | \$34.97 | \$39.96 | | | | | \$17.25 | 1,10 |
| " | 1000 | | | | | | | \$44.96 | \$47.45 | | | \$19.25 | 1,10 |
| * CEMENT FINISHER | | | | | | | | | | | | | |
| Indentured Prior to 9/1/03 | 1000 | \$20.55 | | | | | | | | | | \$10.57 | 2,10 |
| " | 1000 | | \$22.61 | \$24.66 | \$28.77 | \$30.83 | \$32.88 | \$34.94 | \$36.99 | | | \$30.43 | 2,10 |
| Indentured On or After 9/1/03 | 1000 | \$20.55 | \$22.61 | \$24.66 | \$28.77 | \$30.83 | \$32.88 | \$34.94 | \$36.99 | | | \$17.42 | 2,10 |
| * CONSTRUCTION EQUIPMENT OPERATOR | | | | | | | | | | | | | |
| Indentured On or After 9/1/02 | 1000 | \$22.86 | | | | | | | | | | \$9.25 | 3,10 |
| " | 1000 | | \$25.15 | | | | | | | | | \$20.34 | 3,10 |
| " | 1000 | | | \$27.43 | | | | | | | | \$21.35 | 3,10 |
| " | 1000 | | | | \$32.00 | | | | | | | \$23.37 | 3,10 |
| " | 1000 | | | | | \$36.58 | | | | | | \$25.38 | 3,10 |
| " | 1000 | | | | | | \$41.15 | | | | | \$27.40 | 3,10 |
| * DRYWALL INSTALLER | | | | | | | | | | | | | |
| Indentured After 9/1/02 | 1000 | \$20.08 | | | | | | | | | | \$8.62 | 10 |
| " | 1000 | | \$22.59 | | | | | | | | | \$12.15 | 10 |
| " | 1000 | | | \$25.10 | \$30.12 | | | | | | | \$15.25 | 10 |
| " | 1000 | | | | | \$35.14 | \$40.16 | | | | | \$17.25 | 10 |
| " | 1000 | | | | | | | \$45.18 | \$47.69 | | | \$19.25 | 10 |
| DRYWALL TAPERS/FINISHERS | | | | | | | | | | | | | |
| | 1000 | \$17.04 | \$19.17 | \$21.30 | \$23.43 | \$25.56 | | | | | | \$10.80 | |
| | 1000 | | | | | | \$27.69 | | | | | \$11.30 | |
| | 1000 | | | | | | | \$31.95 | \$36.21 | | | \$14.80 | |

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | Interval Hrs | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|---------------------------------------|-----------------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| ELECTRICIAN (WIRE & LINE INSTALLER) | | | | | | | | | | | | | |
| " " | 1000 | \$17.78 | | | | | | | | | | \$9.71 | 10 |
| " " | 1000 | | \$20.32 | | | | | | | | | \$10.06 | 10 |
| " " | 1000 | | | \$22.86 | | | | | | | | \$16.72 | 4,10 |
| " " | 1000 | | | | \$25.40 | | | | | | | \$17.76 | 4,10 |
| " " | 1000 | | | | | \$27.94 | | | | | | \$18.80 | 4,10 |
| " " | 1000 | | | | | | \$30.48 | | | | | \$19.85 | 4,10 |
| " " | 1000 | | | | | | | \$33.02 | | | | \$20.90 | 4,10 |
| " " | 1000 | | | | | | | | \$35.56 | | | \$21.95 | 4,10 |
| " " | 1000 | | | | | | | | | \$40.64 | | \$24.03 | 4,10 |
| " " | 1000 | | | | | | | | | | \$45.72 | \$26.13 | 4,10 |
| (Effective 2/23/20) | | | | | | | | | | | | | |
| * ELECTRICIAN (WIRE & LINE INSTALLER) | | | | | | | | | | | | | |
| " " | 1000 | \$17.96 | | | | | | | | | | \$9.74 | 10 |
| " " | 1000 | | \$20.52 | | | | | | | | | \$10.10 | 10 |
| " " | 1000 | | | \$23.09 | | | | | | | | \$16.78 | 4,10 |
| " " | 1000 | | | | \$25.65 | | | | | | | \$17.83 | 4,10 |
| " " | 1000 | | | | | \$28.22 | | | | | | \$18.88 | 4,10 |
| " " | 1000 | | | | | | \$30.78 | | | | | \$19.93 | 4,10 |
| " " | 1000 | | | | | | | \$33.35 | | | | \$21.00 | 4,10 |
| " " | 1000 | | | | | | | | \$35.91 | | | \$22.05 | 4,10 |
| " " | 1000 | | | | | | | | | \$41.04 | | \$24.14 | 4,10 |
| " " | 1000 | | | | | | | | | | \$46.17 | \$26.25 | 4,10 |
| ELEVATOR CONSTRUCTOR | | | | | | | | | | | | | |
| " " | 850 | \$29.60 | | | | | | | | | | - | 10 |
| " " | 850 | | \$32.56 | | | | | | | | | \$33.705 | 10 |
| " " | 1700 | | | \$38.48 | \$41.44 | \$47.36 | | | | | | \$33.705 | 10 |
| * FLOOR LAYER | | | | | | | | | | | | | |
| Indentured after 2/27/94 | 1000 | \$15.93 | \$17.70 | | | | | | | | | \$19.81 | 10 |
| " " | 1000 | | | \$19.47 | \$21.24 | | | | | | | \$24.81 | 10 |
| " " | 1000 | | | | | \$23.01 | \$24.78 | \$28.32 | \$31.86 | | | \$30.06 | 10 |

CONTINUED: On the Next Page

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | Interval Hrs | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|---|-----------------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| (Effective: 3/1/20) | | | | | | | | | | | | | |
| * FLOOR LAYER | | | | | | | | | | | | | |
| Indentured after 2/27/94 | 1000 | \$16.49 | \$18.33 | | | | | | | | | \$20.05 | 10 |
| " " | 1000 | | | \$20.16 | \$21.99 | | | | | | | \$25.55 | 10 |
| " " | 1000 | | | | | \$23.82 | \$25.66 | \$29.32 | \$32.99 | | | \$31.05 | 10 |
| * GLAZIER | | | | | | | | | | | | | |
| Indentured On or After 7/1/99 | 1000 | \$17.55 | | | | | | | | | | \$30.61 | 5,10 |
| " | 1000 | | \$19.50 | | | | | | | | | \$30.85 | 5,10 |
| " | 1000 | | | \$21.45 | | | | | | | | \$31.09 | 5,10 |
| " | 1000 | | | | \$23.40 | | | | | | | \$31.33 | 5,10 |
| " | 1000 | | | | | \$27.30 | | | | | | \$31.81 | 5,10 |
| " | 1000 | | | | | | \$29.25 | | | | | \$32.05 | 5,10 |
| " | 1000 | | | | | | | \$31.20 | | | | \$32.29 | 5,10 |
| " | 1000 | | | | | | | | \$33.15 | | | \$32.53 | 5,10 |
| " | 1000 | | | | | | | | | \$35.10 | | \$32.77 | 5,10 |
| " | 1000 | | | | | | | | | | \$37.05 | \$33.01 | 5,10 |
| * HEAVY DUTY REPAIRER & WELDER | | | | | | | | | | | | | |
| Indentured on or after 9/1/02 | 1000 | \$22.86 | | | | | | | | | | \$9.25 | 3,10 |
| " | 1000 | | \$25.15 | | | | | | | | | \$20.34 | 3,10 |
| " | 1000 | | | \$27.43 | | | | | | | | \$21.35 | 3,10 |
| " | 1000 | | | | \$32.00 | | | | | | | \$23.37 | 3,10 |
| " | 1000 | | | | | \$36.58 | | | | | | \$25.38 | 3,10 |
| " | 1000 | | | | | | \$38.86 | | | | | \$26.40 | 3,10 |
| " | 1000 | | | | | | | \$41.15 | | | | \$27.40 | 3,10 |
| " | 1000 | | | | | | | | \$43.43 | | | \$28.42 | 3,10 |
| * INSULATOR | | | | | | | | | | | | | |
| Indentured After 5/3/95 | 2000 | \$20.45 | | | | | | | | | | \$8.05 | 6,10 |
| " | 2000 | | \$20.45 | | | | | | | | | \$18.76 | 6,10 |
| " | 2000 | | | \$24.54 | | | | | | | | \$19.10 | 6,10 |
| " | 2000 | | | | \$28.63 | | | | | | | \$19.45 | 6,10 |
| " | 2000 | | | | | \$32.72 | | | | | | \$19.79 | 6,10 |

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | Interval Hrs | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|---|-----------------|-------------------|---------|---------|---------|---------|---------|---------|---------|-----|------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| * IRONWORKER (REINFORCING & STRUCTURAL) | | | | | | | | | | | | | |
| Indentured After 10/31/93 | 1000 | \$20.75 | | | | | | | | | | \$28.93 | 7,10 |
| " | 1000 | | \$22.83 | | | | | | | | | \$29.54 | 7,10 |
| " | 1000 | | | \$24.90 | | | | | | | | \$30.15 | 7,10 |
| " | 1000 | | | | \$29.05 | | | | | | | \$31.37 | 7,10 |
| " | 1000 | | | | | \$33.20 | | | | | | \$32.59 | 7,10 |
| " | 1000 | | | | | | \$37.35 | | | | | \$33.83 | 7,10 |
| * LABORER I | | | | | | | | | | | | | |
| CONSTRUCTION CRAFT | | | | | | | | | | | | | |
| Indentured On or After 9/3/02 | 1000 | \$19.03 | | | | | | | | | | \$8.10 | 1,10 |
| " | 1000 | | \$22.83 | \$26.64 | \$30.44 | | | | | | | \$14.90 | 1,10 |
| HAZARDOUS WASTE MATERIAL TECHNICIAN | | | | | | | | | | | | | |
| " | 1000 | \$19.03 | | | | | | | | | | \$6.70 | 1,10 |
| " | 1000 | | \$22.83 | \$26.64 | \$30.44 | | | | | | | \$13.00 | 1,10 |
| LANDSCAPER | 1000 | \$17.00 | | | | | | | | | | \$7.25 | |
| " | 1000 | | \$18.31 | \$19.61 | \$20.92 | | | | | | | \$11.05 | |
| * MASON | | | | | | | | | | | | | |
| BRICKLAYER | | | | | | | | | | | | | |
| Indentured prior to 9/1/03 | 1000 | \$22.48 | | | | | | | | | | \$10.32 | 2,10 |
| | 1000 | | \$24.73 | \$26.98 | \$31.47 | \$33.72 | \$35.97 | \$38.22 | \$40.46 | | | \$27.97 | 2,10 |
| Indentured On or After 9/1/03 | 1000 | \$22.48 | \$24.73 | \$26.98 | \$31.47 | \$33.72 | \$35.97 | \$38.22 | \$40.46 | | | \$18.17 | 2,10 |
| STONE MASON | | | | | | | | | | | | | |
| Indentured On or After 9/1/03 | 1000 | \$24.73 | \$26.98 | \$29.22 | \$31.47 | \$33.72 | \$35.97 | \$38.22 | \$40.46 | | | \$18.17 | 2,10 |
| POINTER-CAULKER-WEATHERPROOFER | | | | | | | | | | | | | |
| Indentured On or After 9/1/03 | 1000 | \$22.61 | \$24.87 | \$27.13 | \$31.65 | \$36.17 | \$40.69 | | | | | \$18.17 | 2,10 |
| PAINTER | 1000 | \$17.26 | | | | | | | | | | \$9.25 | |
| " | 1000 | | \$19.18 | \$21.09 | \$23.01 | \$24.93 | | | | | | \$12.75 | |
| " | 1000 | | | | | | \$26.85 | | | | | \$13.75 | |
| " | 1000 | | | | | | | \$28.76 | \$32.60 | | | \$14.50 | |

CONTINUED: On the Next Page

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | Interval Hrs | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|---|-----------------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| (Effective 1/1/20) | | | | | | | | | | | | | |
| * PAINTER | 1000 | \$17.46 | | | | | | | | | | \$9.50 | |
| " | 1000 | | \$19.40 | \$21.34 | \$23.28 | \$25.22 | | | | | | \$13.00 | |
| " | 1000 | | | | | | \$27.16 | | | | | \$14.00 | |
| " | 1000 | | | | | | | \$29.10 | \$32.98 | | | \$14.75 | |
| * PAVING EQUIPMENT OPERATOR | 1000 | \$24.43 | | | | | | | | | | \$9.25 | 10 |
| " | 1000 | | \$31.09 | | | | | | | | | \$20.79 | 10 |
| " | 1000 | | | \$35.54 | | | | | | | | \$23.94 | 10 |
| " | 1000 | | | | \$39.98 | | | | | | | \$28.15 | 10 |
| * PLASTERER | | | | | | | | | | | | | |
| Indentured On or After 9/1/03 | 1000 | \$17.06 | \$19.19 | \$21.32 | \$23.45 | \$25.58 | \$29.85 | \$34.11 | \$38.38 | | | \$18.33 | 2,10 |
| PLUMBER: | | | | | | | | | | | | | |
| PLUMBER; FIRE SPRINKLER FITTER; REFRIGERATION | | | | | | | | | | | | | |
| AIR CONDITIONING; STEAMFITTER-WELDER | | | | | | | | | | | | | |
| Indentured On or After 9/2/85 | 1000 | \$17.63 | | | | | | | | | | \$7.94 | 8,10 |
| " | 1000 | | \$17.63 | | | | | | | | | \$7.99 | 8,10 |
| " | 1000 | | | \$20.83 | | | | | | | | \$11.35 | 8,10 |
| " | 1000 | | | | \$20.83 | | | | | | | \$11.35 | 8,10 |
| " | 1000 | | | | | \$24.12 | | | | | | \$12.09 | 8,10 |
| " | 1000 | | | | | | \$24.12 | | | | | \$12.09 | 8,10 |
| " | 1000 | | | | | | | \$28.50 | | | | \$13.02 | 8,10 |
| " | 1000 | | | | | | | | \$28.50 | | | \$13.02 | 8,10 |
| " | 1000 | | | | | | | | | \$32.89 | | \$13.70 | 8,10 |
| " | 1000 | | | | | | | | | | \$32.89 | \$13.70 | 8,10 |

CONTINUED: On the Next Page

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|---|------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| (Effective 1/5/20) | | | | | | | | | | | | | |
| * PLUMBER: | | | | | | | | | | | | | |
| PLUMBER; FIRE SPRINKLER FITTER; REFRIGERATION | | | | | | | | | | | | | |
| AIR CONDITIONING; STEAMFITTER-WELDER | | | | | | | | | | | | | |
| Indentured On or After 9/2/85 | 1000 | \$17.83 | | | | | | | | | | \$8.96 | 8,10 |
| " | 1000 | | \$17.83 | | | | | | | | | \$9.01 | 8,10 |
| " | 1000 | | | \$21.07 | | | | | | | | \$12.37 | 8,10 |
| " | 1000 | | | | \$21.07 | | | | | | | \$12.37 | 8,10 |
| " | 1000 | | | | | \$24.39 | | | | | | \$13.11 | 8,10 |
| " | 1000 | | | | | | \$24.39 | | | | | \$13.11 | 8,10 |
| " | 1000 | | | | | | | \$28.83 | | | | \$14.04 | 8,10 |
| " | 1000 | | | | | | | | \$28.83 | | | \$14.04 | 8,10 |
| " | 1000 | | | | | | | | | \$33.26 | | \$14.72 | 8,10 |
| " | 1000 | | | | | | | | | | \$33.26 | \$14.72 | 8,10 |
| * ROOFER | | | | | | | | | | | | | |
| Indentured Prior to 11/1/98 | 1000 | \$18.52 | \$20.58 | \$24.69 | | | | | | | | \$14.70 | 9 |
| " | 1000 | | | | \$28.81 | \$32.92 | \$37.04 | \$39.09 | | | | \$18.95 | |
| Indentured On or After 11/1/98 and Prior to 11/4/12 | 1000 | \$18.52 | \$20.58 | \$24.69 | | | | | | | | \$14.70 | 9 |
| " | 1000 | | | | \$28.81 | \$32.92 | \$34.98 | \$37.04 | \$39.09 | | | \$18.95 | |
| Indentured On or After 11/4/12 | 2000 | \$18.52 | \$24.69 | | | | | | | | | \$14.70 | 9 |
| " | 2000 | | | \$32.92 | \$37.04 | | | | | | | \$18.95 | 9 |
| SHEETMETAL WORKER | | | | | | | | | | | | | |
| " | 1000 | \$17.25 | | | | | | | | | | \$12.43 | 10 |
| " | 1000 | | \$19.41 | | | | | | | | | \$12.64 | 10 |
| " | 1000 | | | \$21.57 | | | | | | | | \$22.64 | 10 |
| " | 1000 | | | | \$23.72 | | | | | | | \$23.18 | 10 |
| " | 1000 | | | | | \$25.88 | | | | | | \$23.73 | 10 |
| " | 1000 | | | | | | \$28.03 | | | | | \$24.28 | 10 |
| " | 1000 | | | | | | | \$30.19 | | | | \$24.83 | 10 |
| " | 1000 | | | | | | | | \$32.35 | | | \$25.37 | 10 |
| " | 1000 | | | | | | | | | \$34.50 | | \$25.91 | 10 |
| " | 1000 | | | | | | | | | | \$36.66 | \$26.46 | 10 |

APPRENTICE SCHEDULE BULLETIN NO. 496 September 16, 2019

CORRECTION dated 10.18.19

Rates are applicable only to apprentices who are parties to agreements registered with the Department of Labor
and where the journeyworker to apprentice ratio is met.

| Apprentice Classifications | Interval Hrs | BASIC HOURLY RATE | | | | | | | | | | FRINGE BENEFIT HOURLY RATE | Remarks See Pg 8-9 |
|--|-----------------|-------------------|---------|---------|---------|---------|---------|---------|---------|-----|------|----------------------------------|--------------------------|
| | | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | Total | |
| TELECOMMUNICATION WORKER (TECHNICIAN I / SPLICER) | 1000 | \$18.07 | | | | | | | | | | \$10.17 | 10 |
| " " | 1000 | | \$19.57 | | | | | | | | | \$10.42 | 10 |
| " " | 1000 | | | \$21.08 | | | | | | | | \$10.68 | 10 |
| " " | 1000 | | | | \$22.58 | | | | | | | \$10.93 | 10 |
| " " | 1000 | | | | | \$24.09 | | | | | | \$11.19 | 10 |
| " " | 1000 | | | | | | \$27.10 | | | | | \$11.70 | 10 |
| TILE SETTER CERAMIC & HARD TILE | | | | | | | | | | | | | |
| Indentured Prior to 9/1/03 | 1000 | \$20.85 | | | | | | | | | | \$9.57 | 2,10 |
| " | 1000 | | \$22.94 | \$25.02 | \$29.19 | \$31.28 | \$33.36 | \$35.45 | \$37.53 | | | \$28.82 | 2,10 |
| Indentured On or After 9/1/03 | 1000 | \$20.85 | \$22.94 | \$25.02 | \$29.19 | \$31.28 | \$33.36 | \$35.45 | \$37.53 | | | \$16.27 | 2,10 |

* Indicates a wage, fringe benefit, remark, or title change from the previous bulletin.

REMARKS:

1. Carpenter, Construction Craft Laborer: \$.50 per hour shall be added to the regular straight-time rate for height pay for each hour while working from a bosun's chair and/or from a cable-suspended scaffold or work platform which is free swinging (not attached to building) for each hour worked on said rig.
2. Cement Finisher, Mason, Plasterer, Tile Setter: \$1.00 per hour shall be added to the regular straight-time rate for height pay for each hour while working from a bosun's chair and/or from a cable-suspended scaffold or work platform which is free swinging (not attached to building) for each hour worked on said rig.
3. Construction Equipment Operator, Heavy Duty Repairer & Welder: \$1.25 per hour shall be added to the hourly wage while operating a rig suspended by ropes or cables or to perform work on a Yo-Yo Cat.
4. Electrician:
 - A. One and one-half times the straight-time rate while working in a tunnel under construction; under water with aqualung equipment; in a completed tunnel which has only one entrance or exit providing access to safety and where no other personnel are working; or in an underground structure having no access to safety or where no other personnel are working.
 - B. Double the straight-time rate shall be paid for the following types of hazardous work regardless if fall prevention devices are used:
 - 1) While working from poles, trusses, stacks, towers, tanks, bosun's chairs, swinging or rolling scaffolds, supporting structures, and open platforms, over 70 feet from the ground where the employee is subject to a free fall; provided, however, that when work is performed on stacks, towers or permanent platforms where the employees are on a firm footing within an enclosure, a hazardous condition does not exist regardless of height;
 - 2) While working outside of a railing or enclosure, or temporary platforms extending outside of a building, or from scaffolding or ladder within an enclosure where an employee's footing is within one foot of the top of such railing, and the employee is subject to a free fall of over 70 feet;
 - 3) Working on buildings while leaning over the railing or edge of the building, and is subject to a free fall of 70 feet; or
 - 4) Two hours minimum hazardous pay per day shall be paid while climbing to a stack, tower or permanent platform which exceeds 70 feet from the ground but where the employee is on a firm footing within an enclosure.
 - C. Five percent per hour shall be added to the hourly wage for height pay while working above 9,000 feet elevation.
5. Glazier: \$1.00 per hour shall be added to the hourly wage for height pay for exterior glazing work performed in a walking/working surface with an unprotected side or edge 10 feet or more above a lower level which requires protection from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, position devise systems, fall restraint systems, perimeter safety cables or controlled decking zones.
6. Insulator: Six percent per hour shall be added to the hourly wage for hazardous pay while working from a boatswain chair, staging or free standing scaffolding erected from ground up or mezzanine floor subject to a free fall and skyclimber suspended from a permanent structure and when working above 40 feet.
7. Ironworker: \$.50 per hour shall be added to the hourly wage while working in tunnels or coffer dams. \$1.00 per hour shall be added to the hourly wage while working under or covered with water (submerged), or on the summits of Mauna Kea, Mauna Loa or Haleakala.
8. Plumber: One and one-half times the straight-time rate for height pay while working from OSHA approved trusses, stacks, towers, tanks, bosun's chair, swinging or rolling scaffolding, supporting structures or on open platforms where the employee is subject to a direct fall of 40 feet or more. Provided, however, that when said work is performed where the employee is on a firm footing within an enclosure, a hazardous condition does not exist regardless of height. \$1.00 per hour shall be added to the straight-time rate while working with flame cutting or any type of welding equipment on any galvanized material or product for at least an hour.
9. Roofer: When an apprentice has accumulated 2500 hours, \$4.25 will be added to his/her pension/annuity plan.
The apprenticeship program for apprentices indentured on or after November 4, 2012, consists of four steps with 2,000 hours for each step.

REMARKS:

10. Overtime/Holiday must be paid at one and one-half times the basic hourly rate, plus the hourly cost of required fringe, with the following exceptions:

A. **Two times the basic hourly rate, plus the hourly cost of required fringe.**

Boilermaker: Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, July 4th, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Construction Equipment Operator: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Electrician: Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

Elevator Constructor: Saturday, Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Floor Layer: Labor Day.

Glazier: Sunday.

Heavy Duty Repairer & Welder: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Ironworker: Sunday, New Year's Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Paving Equipment Operator: Sunday, New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Kamehameha Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day.

Plumber: Sunday, New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Kamehameha Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Sheetmetal Worker: Sunday, New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Kamehameha Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Telecommunication Worker: Sunday, New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

B. **Three times the basic hourly wage, plus the hourly cost of required fringe on Labor Day.**

Carpenter

Cement Finisher

Drywall Installer

Insulator

Construction Craft Laborer

Mason

Plasterer

Tile Setter

Equipment Operators Classifications

- GROUP 1: Fork Lift (up to and including 10 tons)
Parts Worker (heavy-duty repair shop parts room when needed)
Repairer Helper
- GROUP 2: Conveyor Operator (handling building materials)
Hydraulic Monitor
Mixer Box Operator (concrete plant)
- GROUP 3: Assistant to Engineer (Oiler, Gradechecker) (Hy-Ram (refer to Group 2 wage rate))
Concrete Curing Machine (self-propelled, automatically-applied unit on streets, highways, airports and canals)
Roller (5 tons and under)
Tugger Hoist
- GROUP 4: Boom Truck or Dual Purpose "A" Frame Truck (5 tons or less)
Concrete Placing Boom (building construction)
Elevator Operator
Hoist and/or Winch (one drum)
Rod Worker or Chain Worker (upgraded from Group 3)
Straddle Truck (Ross Carrier, Hyster, and similar)
- GROUP 5: Asphalt Plant Fire Worker
Compressors, Pumps, Generators, and Welding Machines ("Bank" of 9 or more, individually or collectively)
Concrete Trailer Pump or Pumpcrete Guns
Lubrication and Service Engineer (grease rack)
Screed Worker
- GROUP 6: Combination Loader/Backhoe (up to and including 3/4 cu. yd.)
Concrete Batch Plant (wet or dry)
Concrete Cutter, Groover, and/or Grinder (self-propelled unit on streets, highways, airports, and canals)
Concrete Truck Pump Boom or equipment mounted
Conveyor or Concrete Pump (truck or equipment mounted)
Drilling Machinery (not to apply to waterliners, wagon drills, or jack hammers)
Fork Lift (over 10 tons)
Hydraulic Backhoe under 1/2 cubic yard
Hydraulic Backhoe Tractor Mounted under 1/2 cubic yard
Loader (up to and including 3-1/2 cu. yds.)
Lubrication and Service Engineer (mobile)
Lull High Lift (under 40 feet)
Magginnis Internal Full Slab Vibrator (on airports, highways, canals, and warehouses)
Worker or Material Hoist
Mechanical Concrete Finisher (large Clary Johnson, Bidwell, Bridge Deck, and similar)
Mobile Truck Crane Driver
Portable Boring Machine (under streets, highways, etc.)
Portable Crusher
Portable Shot blast Concrete Cleaning Machine
Power Jumbo Operator (setting slip forms, etc., in tunnels)
Power Sweeper
Roller (over 5 tons)

Equipment Operators Classifications

GROUP 6 (continued):

Self-Propelled Compactor (single engine)
 Self-Propelled Pavement Breaker
 Skidsteer Loader with attachments
 Slip Forms Pump (power-driven by hydraulic, electric, air, gas, etc., lifting device for concrete forms)
 Small Rubber-Tired Tractor
 Spider Excavator
 Trencher (up to and including 6 feet)
 Underbridge Personnel Aerial Platform (50 feet of platform or less)

GROUP 7: Boom Truck or Dual Purpose "A" Frame Truck (over 5 tons up to and including 17 tons)

Crusher Plant Engineer
 Dozer (D-4, Case 450, John Deere 450, and similar)
 Dual Drum Mixer
 Extend Lift
 Hoist and/or Winch (2 drums)
 Loader (over 3-1/2 cu. yds. up to and including 6 cu. yds.)
 Mechanical Finisher or Spreader Machine (asphalt) (Barber Greene and similar)
 Mine or Shaft Hoist
 Mobile Concrete Mixer (over 5 tons)
 Pipe Bending Machine (pipelines only)
 Pipe Cleaning Machine (tractor propelled and supported)
 Pipe Wrapping Machine (tractor propelled and supported)
 Roller Operator (asphalt)
 Self-Propelled Elevating Grade Plane
 Speed Swing
 Tractor (with boom) (D-6 or similar)
 Trencher (over 6 feet and less than 200 H.P.)
 Water Tanker (pulled by Euclids, T-pulls, DW-10, 20, 21, or similar)

GROUP 8:

Asphalt Plant Operator
 Cast-in-Place Pipe Laying Machine
 Concrete Batch Plant (multiple units)
 Conveyor Operator (tunnel)
 Dozer (D-6 and similar)
 Finishing Machine Operator (airports and highways)
 Gradesetter
 Horizontal Directional Drill (HDD) Locator
 Hydraulic Backhoe (over 1/2 cu. yd. up to and including 3/4 cu. yd.)
 Kolman Loader (and similar)
 No-Joint Pipe Laying Machine
 Portable Crushing and Screening Plant
 Power Blade Operator (under 12)
 Saurman Type Dragline (up to including 5 yds.)
 Stationary Pipe Wrapping, Cleaning, and Bending Machine
 Surface Heater and Planer Operator
 Tractor (D-6 and similar)
 Tri-Batch Paver
 Tunnel Badger
 Tunnel Mole and/or Boring Machine Operator
 Underbridge Personnel Aerial Platform (over 50 feet of platform)

Equipment Operators Classifications

- GROUP 9: Combination Mixer and Compressor (gunite)
Do-Mor Loader and Adams Elegrader
Dozer (D-7 or equal)
Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 H.P.)
- GROUP 9A: Dozer (D-8 or similar)
Instrument Worker (upgraded from Group 7)
Push Cat
Scraper (up to and including 20 cu. yds.)
Self-Propelled Compactor with Dozer
Self-Propelled, Rubber-Tired Earthmoving Equipment (up to and including 20 cu. yds.)
(621B and similar)
Sheep's Foot
Tractor with Boom (larger than D-6, and similar)
- GROUP 10: Chicago Boom
Cold Planers
Heavy Duty Repairer/Welder
Hoist and/or Winch (3 drums)
Hydraulic Scooper (Koehring and similar)
Loader (over 6 cu. yds. up to and including 12 cu. yds.)
Self-Propelled, Rubber-Tired Earthmoving Equipment (over 20 cu. yds. up to and including 31 cu. yds.) (637D and similar)
Soil Stabilizer (P&H or equal)
Sub-Grader (Gurries or other automatic type)
Tractors (D-9 or similar) (all attachments)
Tractor (Tandem Scraper)
Watch Engineer
- GROUP 10A: Boat Operator
Boom Truck or Dual Purpose "A" Frame Truck (over 17 tons)
Cable-Operated Crawler Crane (up to and including 25 tons)
Cable-Operated Power Shovel, Clamshell, Dragline, and Backhoe (up to and including 1 cu. yd.)
Gradall (up to and including 1 cu. yd.)
Gradesetter (When working from drawings, plans or specifications without the direct supervision of a Foreman or Superintendent.)
Hydraulic Backhoe (over 3/4 cu. yd. up to and including 2 cu. yds.)
Mobile Truck Crane Operator (up to and including 25 tons)
Self-Propelled Boom-Type Lifting Device (center mount) (up to and including 25 tons)
(Grove, Drott, P & H, Pettibone, and similar)
Trencher (over 6 feet and 750 H.P. or more)
Watch Engineer (steam or electric)
- GROUP 11: Automatic Slip Form Paver (concrete or asphalt)
Band Wagon (in conjunction with Wheel Excavator)
Cable-Operated Crawler Crane (over 25 tons but less than 50 tons)
Cable-Operated Power Shovel, Clamshell, Dragline, and Backhoe (over 1 cu. yd. up to 7 cu. yds.)
Chief of Party (upgraded from Group 10)
Directional Drill Operator

Equipment Operators Classifications

GROUP 11 (continued):

Dozer D-10 (or similar) (upgraded from Group 10)
 DW-10, 20, etc. (Tandem)
 Earthmoving Machine (multiple propulsion power unit and 2 or more scrapers)
 (up to and including 35 cu. yds. "struck" m.r.c.)
 Gradall (over 1 cu. yd. up to 7 cu. yds.)
 Hydraulic Backhoe (over 2 cu. yds. up to and including 4 cu. yds.)
 Lift Slab Machine
 Loader (over 12 cu. yds.)
 Mobile Truck Crane Operator (over 25 tons but less than 50 tons)
 Pre-Stress Wire Wrapping Machine
 Self-Propelled Boom Type Lifting Device (center mount) (over 25 tons m.r.c.)
 Self-Propelled Compactor (with multiple-propulsion power units)
 Single Engine Rubber-Tired Earthmoving Machine (with Tandem Scraper)
 Tandem Cat
 Trencher (pulling attached shield)

GROUP 12:

Clamshell or Dipper Operator
 Derrick
 Drill Rig
 Heading Shield Operator
 Mucking Machine (rubber tired, rail or track type)
 Multi-Propulsion Earthmoving Machine (2 or more scrapers) (over 35 cu. yds. "struck"
 m.r.c.)
 Operators (Derricks, Piledrivers and Cranes)
 Power Shovel and Dragline (7 cu. yds. m.r.c. and over)
 Raised Bore Operator
 Road Header Operator
 Self-Propelled, Rubber-Tired Earthmoving Equipment (over 31 cu. yds.) (657B and
 similar)
 Tunnel Mole Bore Operator
 Wheel Excavator (up to and including 750 cu. yds. per hour)

GROUP 12A:

Dozer (D-11 or similar or larger)
 Hydraulic Excavators (over 4 cu. yds.)
 Lifting Cranes (50 tons and over)
 Mounted Truck Crane Operator (over 50 tons)
 Pioneering Dozer/Backhoe (Initial clearing and excavation for the purpose of
 providing access for other equipment where the terrain worked involves 1 to 1 slopes
 that are 50 feet in height or depth. The scope of this work does not include normal
 clearing and grubbing on usually hilly terrain nor the excavation work once the
 access is provided.)
 Power Blade Operator (Cat 12 or equivalent or over)
 Straddle Lifts (over 50 tons)
 Tower Crane, Mobile
 Traveling Truss Cranes
 Tunnel Boring Machine Operator – 10 feet and above
 Universal, Liebherr, Linden, and similar types of Tower Cranes
 Yo-Yo Cat or Dozer

SPECIAL PROVISIONS

1. **GENERAL REQUIREMENTS AND COVENANTS:**

The General Requirements and Covenants of the Department of Public Works, County of Hawai'i (July, 1972), shall be read by the Contractor, as they form a part of the agreement to be entered into between the Contractor and the County of Hawai'i. The General Requirements and Covenants are not physically included in these specifications, but are included by reference. Copies are available at the Department of Public Works.

Shall there be any conflict between the General Requirements and Covenants and Chapter 103D of the Hawai'i Revised Statutes, Chapter 103D of the Hawai'i Revised Statutes shall prevail.

2. **SPECIFICATIONS SECTION:**

Sections in these specifications conform roughly to the customary trade practice. They are used for convenience only. The Director is not bound to define the limits of any subcontract.

3. **LINES AND LEVELS:**

a. Established by the County of Hawai'i. Control points and bench marks shown on the drawings.

b. Established and maintained by the Contractor. All other lines, levels, and bench marks necessary for the execution of the work. Employ a competent surveyor to layout work; be responsible for its accuracy.

4. **WATER AND ELECTRICITY:**

The Contractor shall make all arrangements and pay for installation and use of all temporary water and electric power facilities as required for the construction work under this contract. At the completion of the work, the Contractor shall remove all such temporary facilities at its own expense.

5. **NOTICE CONCERNING ECONOMIC STABILIZATION ACT OF 1970, AS AMENDED:**

The bidder is reminded that mandatory provision of Federal measures promulgated under authority of the Economic Stabilization Act of 1970 (P.L. 91-379, 84 Stat. 799) including Executive Orders of the President, amendments thereto, and rules and regulations issued thereunder may be applicable to invitations to bid, bid proposals and contracts.

In addition, all bid proposals submitted shall, to the best of the bidder's knowledge and belief, be in accordance with applicable mandatory provisions of measures promulgated by authority of the Economic Stabilization Act of 1970, and where any provision of the contract specifications is inconsistent, such mandatory provisions shall control.

6. REVISIONS TO GENERAL REQUIREMENTS AND COVENANTS:

Section 2.1 - Competency of Bidder. Delete this section in its entirety and replace it with the following: "Each prospective bidder must file a written notice of its intention to bid 10 days prior to the day designated for opening offers in compliance with Section 103D-310, Hawai'i Revised Statutes, as such section may be amended or superseded from time to time. If the day that is ten (10) calendar days prior to the bid opening date is a Saturday, Sunday, or State holiday, the intent to bid shall be due on the next working day following the due date. The procurement officer may require any prospective offeror to submit answers to the standard qualification questionnaire form and may make a determination of nonresponsibility with respect to any offeror in accordance with Section 103D-310, Hawai'i Revised Statutes, as such section may be amended or superseded from time to time.

Section 2.5 - Addenda, Bulletins and Interpretations. Delete "not later than five (5) days," between the "comma" and the word "prior" in line 6 of the second paragraph. The corrected sentence shall read, "Any interpretation, if made, and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted on the State and County Procurement Website. All plan holders will be notified of any addendum issued.

Section 2.8 - Proposal Guaranty. Delete second sentence of first paragraph in its entirety and replace with the following. "The proposal guaranty shall be equal to five percent (5%) of the total amount of the bid submitted."

Add new paragraph after the first paragraph. "A certificate of deposit, cashier's check or certified check may be utilized only to a maximum of one hundred thousand dollars (\$100,000.00) per issuing financial institution. The bid deposits shall conform to the requirements of HRS 103D-323, HAR 3-122-222 and HAR 3-122-233."

Section 3.5 - Requirement of Contract Bond. Add to first paragraph, "The performance and payment bonds shall each be in an amount equal to one hundred percent (100%) of the amount of the contract price including amounts estimated to be required for extra work, the bond amount shall be as designated in the bid documents (Section 103D-324, Hawai'i Revised Statutes and Section 3-122-224 of the Hawai'i Administrative Rules."

Performance and Payment bonds will not be required if the successful bid is below the small purchase threshold amount of HRS Section 103D-324 and 103D-305 in effect at the time of award (currently the threshold is \$25,000), except as may otherwise be required by law to accommodate those cases where some federal requirement may apply.

Section 4 – Scope of Work. Amended to adopt and include by reference the language of Hawai'i Administrative Rules, Sections: 3-125-4, Changes for Construction Contracts; 3-125-10, Variations in Estimated Quantities for Construction Contracts; 3-125-13, Price Adjustment for Construction.

Section 5.4 – Coordination of Contract Documents. Last sentence of paragraph 2 of section 5.4 was actually highlighted. When copies were made over the years, it inadvertently was blacked out in the GRC. Add the following sentence as the last sentence to the second paragraph. "In case of discrepancy, figured dimensions shall govern over scaled dimensions; technical specifications shall govern over plans; special provisions and proposal shall govern over the General Requirements and Covenants."

Section 5.6 (a) - Plans and Specification. Delete Section 5.6 (a) in its entirety and replace with the following:

"Plans and Specifications – The Contractor will be supplied with one (1) set of the plans and specifications for this project in electronic format (file types, media and means as determined appropriate by the County) upon successful execution of the contract. Physically printed sets of the plans and specification will not be provided. Likewise, all addendum, post contract documents and similar revision will be issued in electronic format only. When required by an applicable county or state permit (such as Building, Plumbing, Electrical, Grubbing, Grading, Work in the Right of Way, etc.), the requisite set(s) of plans and/or specifications will be furnished as required by the applicable permit(s).

The Contractor shall have available on the project site, at all times, one copy of each said plans and specifications and keep them in clean, neat and legible condition at all times. The Contractor shall maintain the plans and specifications at the project site current, incorporating all addenda, post-contract modifications, and supplemental information issued by the County.

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Engineer and with other contractors in very possible way."

Section 5.6 (f) - Field Office. The Contractor shall furnish a field office only when

specified in the proposal or construction plans.

Section 5.6 (g) - Project Sign. Delete Section 5.6(g) in its entirety and replace with the following:

“When specified in the proposal or construction plans, the Contractor shall furnish and install two (2) project signs. One sign shall contain the project information and the second sign shall contain a full color rendering of the proposed facility. In general, if the project is for a repair maintenance or renovation of an existing facility, then only one (1) project informational sign will be required. Sign(s) shall be constructed of 4' x 8' x 3/4" exterior grade plywood mounted at a minimum of 7 feet from grade to bottom edge of sign. Graphic content for each sign shall be provided by the owner to the contractor in digital format.

The Contractor shall submit a layout of the sign(s) before proceeding with the work and shall make all requested changes. The approved project sign(s) shall be rigidly and firmly braced and securely attached to supports and shall be so constructed to withstand wind pressure of not less than 30 pounds per square foot of area subject to pressure.”

Section 6.2 - Substitution of Materials and Equipment. Line 9 of (a) Before Bid Opening: - Change “ten (10)” to “fourteen (14)”. Paragraph 6 shall be revised to read: “This addendum shall be posted no less than five (5) days before the opening date of bids, not including the date of bid opening.”

Section 7.1 - Laws to be Observed.

Delete 7.1(g) Preference for American Products (Section 103-24) its entirety.

Add the following to end of the introductory paragraph: “The following subsections are meant to summarize and incorporate the statutes referenced in their entirety. Contractor is responsible to check for any amendments to the statutes referenced, and comply with the statutes as amended.”

Add new subsections (m), (n), (o) and (p) to read:

“(m) Prompt payment - (Section 3-125-23, Hawai'i Administrative Rules)

(a) Any money paid to a contractor shall be disbursed to subcontractors within 10 days after receipt, in accordance with the subcontract if the subcontractor has met all terms and conditions of the subcontract and there are no bona fide disputes on which the procurement officer has withheld payment.

(b) Upon final payment to the contractor, full payment to the subcontractor, including retainage, shall be made within ten (10) days after receipt of the money if there are no bona fide disputes over the subcontractor's performance under the subcontract.

(c) Where a subcontractor has provided evidence to the contractor of satisfactorily completing all work under their subcontract and has provided a properly documented final payment request (as described in the next paragraph), and

(1) Has provided to the contractor an acceptable performance and payment bond for the project executed by a surety company authorized to do business in the state, as provided in HRS Section 103-32.1; or

(2) The following has occurred:

(A) Ninety (90) days has elapsed after the day on which the last of the labor was done, and the last of the material was furnished or supplied, and there has been no written notice of a claim given to contractor and surety under section 103D-324; and

(B) The subcontractor has provided the contractor

(i) an acceptable release of retainage bond, executed by a surety company authorized to do business in the state, for not more than twice the amount being retained or withheld by the contractor; or

(ii) Any other bond acceptable to the contractor; or

(iii) Any other form of mutually acceptable collateral,
THEN, All sums retained or withheld from a subcontractor and otherwise due to the subcontractor for satisfactory performance under the subcontract shall be paid by the procurement officer to the contractor and subsequently, upon receipt from the procurement officer, by the contractor to the subcontractor within the applicable time periods specified in subsection (b) and section 103-10. If the procurement officer or the contractor fails to pay in accordance with this section, a penalty of 1.5 % per month shall be imposed upon the outstanding amounts due that were not timely paid by the responsible party. The penalty may be withheld from future payment due to the contractor, if the contractor was the responsible party. If a contractor has violated subsection (b) 3 or more times within 2 years of the first violation, the contractor shall be referred by the procurement officer to the contractor license board for action under section 444-17(14).

(d) A properly documented final payment request from a subcontractor under

subsection (c) shall include:

- (1) Substantiation of the amounts requested;
- (2) A certification by the subcontractor, to the best of the subcontractor's knowledge and belief, that:
 - (a) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the subcontract;
 - (b) The subcontractor has made payments due to its subcontractors and suppliers from previous payments received under the subcontract and will make timely payments from the proceeds of the payment covered by the certification, in accordance with their subcontract agreements and the requirements of this section; and
 - (c) The payment request does not include any amounts that the subcontractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of their subcontract; and
- (3) The submission of documentation confirming that all other terms and conditions required under the subcontract agreement have been fully satisfied.

The procurement officer shall return any final payment request that is defective to the contractor within seven days after receipt, with a statement identifying the defect.

(e) In the case of a construction contract, a payment request made by a contractor to the procurement officer that includes a request for sums that were withheld or retained from a subcontractor and are due to a subcontractor may not be approved under subsection (c) unless the payment request includes:

- (1) Substantiation of the amounts requested;
- (2) A certification by the contractor, to the best of the contractor's knowledge and belief, that:
 - (a) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
 - (b) The subcontractor has made payments due to its subcontractors and suppliers from previous payments received under the contract and will make timely payments from the proceeds of the payment covered by the certification, in accordance

with their subcontract agreements and the requirements of this section; and

(c) The payment request does not include any amounts that the contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of their subcontract.

The procurement officer shall return any final payment request that is defective to the contractor within seven days after receipt, with a statement identifying the defect.

(f) This section shall not be construed to impair the right of a contractor or a subcontractor at any tier to negotiate and to include in their respective subcontracts provisions that provide for additional terms and conditions that are requested to be met before the subcontractor shall be entitled to receive final payment under subsection (c) of this section; provided that any such payments withheld shall be withheld by the procurement officer.”

“(n) Contract Clauses and their Administration - (Section 103-10.5, Hawai‘i Revised Statutes) - Adjustments in price permitted by rules adopted under HRS Section 103D-501(a) shall be computed in one or more of the following ways:

(1) By agreement on a fixed price adjustment before commencement of the pertinent performance;

(2) By unit prices specified in the contract or subsequently agreed upon before commencement of the pertinent performance;

(3) By the costs attributable to the events or situations under such clauses with adjustment of profit or fee, all as specified in the contract or subsequently agreed upon before commencement of the pertinent performance;

(4) In any other manner as the contracting parties may mutually agree upon before commencement of the pertinent performance; or

(5) In the absence of agreement by the parties:

(A) For change orders with value not exceeding \$50,000, by documented actual costs of the work, allowing for 20% of the actual costs for overhead and profit on work done directly by the contractor and 10% on any subcontractor’s billing to the contractor for the contractor’s overhead and profit. There shall be no cap on the total cost of the work if this method is used. A change order shall be issued within 15 days of submission by the contractor of proper documentation of completed force account work, whether periodic (conforming to the applicable billing cycle) or final. The procurement officer shall return any documentation that is

defective to the contractor within 15 days after receipt, with a statement identifying the defect; or

(B) For change orders with value exceeding \$50,000 by a unilateral determination by the governmental body of the costs attributable to the events or situations under clauses with adjustment of profit or fee, all as computed by the governmental body in accordance with applicable sections of the rules adopted under section 103D-601 and subject to the provisions of Part VII of HRS Chapter 103D. When a unilateral determination has been made, a unilateral change order shall be issued within 10 days. Costs included in the unilateral change order shall allow for 20% of the actual costs for overhead and profit on work done directly by the contractor and 10% on any subcontractor's billing to the contractor for the contractor's overhead and profit. Upon receipt of the unilateral change order, if the contractor does not agree with any of the terms or conditions, or the adjustment or nonadjustment of the contract time or contract price, the contractor shall file a notice of intent to claim within 30 days after the receipt of the written unilateral change order. Failure to file a protest within the time specified shall constitute agreement on the part of the contractor with the terms, conditions, amounts, and adjustment or nonadjustment of the contract price set forth in the unilateral change order.

A contractor shall be required to submit cost or pricing data if any adjustment in contract price is subject to the provisions of HRS Section 103D-312. A fully executed change order or other document permitting billing for the adjustment in price under any method listed in paragraphs (1) through (4) above shall be issued within 10 days after agreement on the method of adjustment."

"(o) Apprenticeship Program Preference (Section 103-55.6, Hawai'i Revised Statutes) - In order to comply with the intent of this law the Bidder must complete the form provided in the proposal which lists the trades the Bidder will employ to perform the work. The Contractor must also submit monthly certifications of compliance."

"(p) Employment of State Residents on Construction Procurement Contracts, Chapter 103B, Hawai'i Revised Statutes, as Amended by Act 192, Session Laws of Hawai'i [SLH] 2011 (eff. July 1, 2011).

In accordance with State of Hawai'i, Department of Accounting and General Services' COMPTROLLER'S MEMORANDUM NO. 2011-18, dated July 25, 2011, the following is hereby incorporated:

(1) Definitions for terms used in HRS Chapter 103B as amended by Act 192, SLH 2011:

- (A) "Contract" means contracts for construction under 103D, HRS.
- (B) "Contractor" has the same meaning as in Section 103D-104, HRS, provided that "contractor" includes a subcontractor where applicable.
- (C) "Construction" has the same meaning as in Section 103D-104, HRS.
- (D) "General Contractor" means any person having a construction contract with a governmental body.
- (E) "Procurement Officer" has the same meaning as in Section 103D-104, HRS.
- (F) "Resident" means a person who is physically present in the State of Hawai'i at the time the person claims to have established the person's domicile in the State of Hawai'i and shows the person's intent is to make Hawai'i the person's primary residence.
- (G) "Shortage trade" means a construction trade in which there is a shortage of Hawai'i residents qualified to work in the trade as determined by the Department of Labor and Industrial Relations.

(2) HRS Chapter 103B as amended by Act 192, SLH 2011 – Employment of State Residents Requirements:

- (A) A Contractor awarded a contract shall ensure that Hawai'i residents comprise not less than 80% of the workforce employed to perform the contract work on the project. The 80% requirement shall be determined by dividing the total number of hours worked on the contract by Hawai'i residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by a Subcontractor of the Contractor shall count toward the calculation for this section. The hours worked by employees within shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.
- (B) Prior to award of a contract, an Offeror/Bidder may withdraw an offer/bid without penalty if the Offeror/Bidder finds that it is unable to comply with HRS Chapter 103B as amended by Act 192, SLH 2011.
- (C) Prior to starting any construction work, the Contractor shall submit the subcontract dollar amount for each of its Subcontractors, in a form and manner acceptable to the Director.

(D) The requirements of this section shall apply to any subcontract of \$50,000 or more in connection with the Contractor; that is, such Subcontractors must also ensure that Hawai'i residents comprise not less than 80% of the Subcontractor's workforce used to perform the subcontract.

(E) The Contractor, and any Subcontractor whose subcontract is \$50,000 or more, shall comply with the requirements of HRS Chapter 103B as amended by Act 192, SLH 2011.

i. Certification of compliance shall be made in writing under oath by an officer of the General Contractor and applicable Subcontractors and submitted with the final payment. The Certificate shall be as provided by the Director.

ii. The certification of compliance shall be made under oath by an officer of the company by completing a "Certification of Compliance for Employment of State Residents" form and execute the Certificate before a licensed notary public.

iii. In addition to the certification of compliance as indicated above, the Contactor and Subcontractors shall maintain records such as certified payrolls for laborers and mechanics who performed work at the site and time sheets for all other employees who performed work on the project. These records shall include names, addresses and number of hours worked on the project by all employees of the Contractor and Subcontractor who performed work on the project to validate compliance with HRS Chapter 103B as amended by Act 192, SLH 2011. The Contactor and Subcontractors shall retain these records and provide access to the County and State for a minimum period of four (4) years after the final payment, except that if any litigation, claim, negotiation, investigation, audit or other action involving the records has been started before the expiration of the four-year period, the Contractor and Subcontractors shall retain the records until completion of the action and resolution of all issues that arise from it, or until the end of the four-year period, whichever occurs later. Furthermore, it shall be the Contractor's responsibility to enforce compliance with this provision by any Subcontractor.

(F) A General Contractor or applicable Subcontractor who fails to comply with this section shall be subject to any of the following sanctions:

i. With respect to the General Contractor, withholding of payment on the contract until the Contractor or its Subcontractor complies with HRS Chapter 103B as amended by Act 192, SLH 2011.

ii. Proceedings for debarment or suspension of the Contractor or Subcontractor under Hawai'i Revised Statutes §103D-702.

(3) Conflict with Federal Law: This section shall not apply if the application of this section is in conflict with any federal law, or if the application of this section will disqualify the County from receiving federal funds or aid.”

Section 7.8 - Contractor's Responsibility for Work. Amend the entire section to read: “7.8 CONTRACTOR'S RESPONSIBILITY FOR WORK – Until acceptance by the Director of any part of all the construction as provided for in these specifications, the construction shall be under the charge and care of the Contractor, who shall take every necessary precaution against injury or damage to any part of the work by the action of the elements or from any other cause whatsoever whether arising from the execution or from the non-execution of the work. Before its completion and acceptance by the Director, the Contractor shall rebuild, repair, restore and make good at its own expense all injuries or damage to any portion of the work occasioned by any of the above causes; provided, however, the Contractor shall not be responsible for any injury or damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to, war, blockage, revolution, insurrection, civil commotion, riot, mobilization, strike, plague, epidemic, fire, flood, Act of Government or public enemy and Acts of God, such as earthquakes, tsunami and lava flows. The Contractor shall be responsible for coordinating the work of all trades on the job and shall be liable for the acts of subcontractors as the prime Contractor on the project.”

Section 7.12 – Insurance.

Section 7.12 (b) – Workmen's Compensation. Delete in its entirety and replace with the following:

“(b) Workers Compensation and Employers' Liability Insurance – The Contractor shall, in accordance with Hawai'i Workers' Compensation Law, HRS 386, “Employers Liability”, shall secure required workers' compensation and employers' liability insurance with minimum limits of \$100,000 (bodily injury per occurrence) for all of his employees who will be engaged in work at the site of the project, and in case any part of such Contractor's contract is sublet, the Contractor will require his subcontractor to maintain such insurance for all the subcontractor's employees who will be so engaged, unless the latter's employees are protected by the principal Contractor's insurance. The policy shall remain in full force and effect for the term of this contract and which further names the County of Hawai'i and its officers and employees as an additional insured. The limits required under the contract may not be adequate and any limit requirement contained

in the contract shall not act as a limitation of contractor's indemnification and/or liability."

Section 7.12 (c) – Public Liability and Property Damage Insurance. Delete in its entirety and replace with the following:

"(c) Public Liability and Property Damage Insurance - The Contractor shall secure required public liability insurance with limits not less than ONE MILLION AND NO/100 DOLLARS (\$1,000,000.00) covering death, personal injury, and damage to property (per occurrence), which policy shall remain in full force and effect for the term of this contract and which further names the County of Hawai'i and its officers and employees as an additional insured. The limits required under the contract may not be adequate and any limit requirement contained in the contract shall not act as a limitation of contractor's indemnification and/or liability.

Add new subsection (d) to read:

"(d) Modifications or Cancellations of Insurance Policy – The Contractor is required to notify the County at least sixty (60) days prior to the Contractor seeking to modify or cancel any of the insurance policies required by this contract. The Contractor is also required to notify the County immediately of any modification or cancellation of any required insurance policy that is initiated by the insurance carrier."

Add new subsection (e) to read:

"(e) Automobile Liability Insurance - The Contractor shall secure required automobile liability insurance policy with minimum limits of \$100,000 (bodily injury per person) / \$300,000 (bodily injury per occurrence) / \$100,000 (property damage per occurrence) coverage (assuming Contractor will be using vehicles(s) in performance of the scope of work), which policy shall remain in full force and effect for the term of this contract and which further names the County of Hawai'i and its officers and employees as an additional insured. The limits required under the contract may not be adequate and any limit requirement contained in the contract shall not act as a limitation of contractor's indemnification and/or liability."

The Contractor shall file with the Department of Public Works copies of a certificate of insurance showing it has in full force and effect the required insurance.

Section 8 – Prosecution & Progress. Amended to adopt and include by reference the language of Hawai'i Administrative Rules, Sections: 3-125-7, Suspension of Work for Construction Contracts; 3-125-11, Differing Site Conditions for Construction Contracts; 3-125-13, Price Adjustment for Construction Contracts; 3-125-14, Novation or Change of Name;

3-125-16, Claims Based on Oral Directives; 3-125-18, Default, Delay, and Time Extensions for Construction Contracts; 3-125-20, Liquidated Damages for Construction Contracts; 3-125-22, Termination for Convenience of Construction Contracts; 3-125-23, Prompt Payment by Contractors to Subcontractors; 3-125-24, Remedies; 3-126-31, Disputes Clause.

Section 8.11 – Failure to Complete the Work on Time. Replace this section, in its entirety, with the following:

“It is mutually agreed by and between the parties hereto that time shall be an essential part of this contract and that in the case of the failure on the part of the Contractor to complete its contract within the time specified and agreed upon, in the contract and in all supplements thereto, in addition to all other remedies for breach that may be available to the County of Hawai‘i, the County of Hawai‘i will be damaged thereby and the Contractor shall pay liquidated damages to the County in the amount specified in the Contract. The amount of said damages, being difficult to determine definitely, shall be the sum set determined by the County as appropriate for the scope of the project and the projected extent of damages as set forth in the Proposal for every calendar day’s delay in finishing the work in excess of the contract duration agreed to. The Contractor hereby agrees that said sum shall be deducted from monies due the Contractor under the contract, or, if no money is due the Contractor, the Contractor hereby agrees to pay to the County of Hawai‘i as liquidated damages, and not by way of penalty, such total sum as shall be due for such delay, computed as aforesaid.

a. Liquidated Damages for Failure to Complete Portion(s) of the Work within a Project with Predetermined Time Constraints: The Contractor shall complete the specific portions of work within the Contract that have predetermined completion dates or time periods separate from the overall contract’s duration. When the Contractor fails to complete such portion(s) of work, the Contractor shall pay liquidated damages to the County of Hawai‘i of one hundred percent (100%) of the amount of liquidated damages established for failure to substantially complete the work within the contract time.

b. Liquidated Damages for Failure to Complete the Punchlist: The Contractor shall complete the work identified on all punchlists created after substantial completion, within the contract time and any extensions thereof.

When the Contractor fails to complete the work of such punchlists within the contract time or any extension thereof, the Contractor shall pay liquidated damages to the County of Hawai‘i of fifty percent (50%) of the amount of liquidated damages established for failure to substantially complete the work within the contract time. Liquidated damages shall not be

assessed for the period between:

i. The Project Inspector's verification of the work being at a state ready for Final Inspection, (also referred to as "Substantial Completion of the work") and the time the punchlist is delivered to the Contractor; and

ii. The date of the Final Inspection that results in Final Acceptance and the receipt by the Contractor of the written Notice of the Final Acceptance.

c. Liquidated Damages Upon Termination: If the county terminates the contract on account of the contractor's default, liquidated damages shall be assessed against the defaulting Contractor and its Surety until final completion of the work is accomplished by whatever alternate means selected or enacted by the County of Hawai'i.

d. Actual Damages Recoverable if Liquidated Damages Deemed Unenforceable: In the event a court of competent jurisdiction holds that any liquidated damages assessed pursuant to this contract are unenforceable, the County of Hawai'i will be entitled to recover its actual damages for the Contractor's failure to complete the work, or any designated portion thereof within the time set by the contract."

Section 8.12 - Termination of Contract. Add new paragraph to the end of the section as follows:

"It is understood and agreed that any services to be provided in accordance with the terms of this contract may be terminated immediately, in whole or in part, upon a finding by the County or any court of competent jurisdiction that these services must be provided by public employees pursuant to Civil Service or other law. It is further understood, that should such a finding be made, the County will not be liable under this contract for any resulting damages, and such a termination will not be considered a breach of this contract."

Section 9.4 - Payment for Additional Work. Revise (b) Force-Account Work,

item 1, delete "15%" in line nine and replace with "20%."

item 2, delete "15%" in line five and replace with "20%."

item 3, paragraph one to read: "For any machinery or special equipment other than small hand operated, unautomatic tools shall be paid for at the rental rates agreed upon in writing prior to any work being done. The rental rates are specified in the current edition of 'Rental Rate Blue Book for Construction Equipment' published by EquipmentWatch with the following modifications:"

item 3, paragraph six, delete "15%" in line two and replace with "20%."

Section 9.6 - Partial Payments. Delete the last two sentences, and add:

"It is provided, however, that after 50% of the contract is completed and progress is satisfactory, no additional sum shall be withheld; provided further that if progress is not satisfactory, the procurement officer may continue to withhold, as retainage, sums not exceeding 5% of the amount due the contractor. The retainage shall not include sums deducted as liquidated damages from moneys due or that may be come due the contractor under the contract.

Where a subcontractor has provided evidence to the contractor of:

- (1) A valid performance and a payment bond for the project that is acceptable to the contractor and executed by a surety company authorized to do business in this State;
- (2) Any other bond acceptable to the contractor; or
- (3) Any other form of collateral acceptable to the contractor, the retention amount withheld by the contractor from its subcontractor shall be not more than the same percentage of retainage as that of the contractor. This subsection shall also apply to the subcontractors who subcontract work to other subcontractors.

Contractors or subcontractors at any tier have the right to negotiate, and include in their subcontract, provisions that:

- (1) Permit the contractor or subcontractor to retain, without cause, a specified percentage of no more than 10% of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract, without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond, subject however to the limitations of the previous paragraph; and
- (2) Permit the contractor or subcontractor to make a determination that part or all of the subcontractor's payment request may be withheld by the procurement officer in accordance with the subcontract agreement, without incurring any obligation to pay interest or a late payment penalty if:
 - (A) A notice conforming to the standards of the next paragraph has been previously furnished to the subcontractor; and

(B) A copy of said notice has been furnished to the procurement officer.

A written notice of any withholding shall be issued to a subcontractor, with a copy to the procurement officer, specifying the following:

- (1) The amount to be withheld;
- (2) The specific causes for the withholding under the terms of the subcontract; and
- (3) The remedial actions to be taken by the subcontractor to receive payment of the amounts withheld.

A contractor may not request payment from the procurement officer of any amount withheld or retained in accordance with the foregoing subcontract retainage provisions until the contractor has certified to the procurement officer that the subcontractor is entitled to the payment of that amount.

The foregoing shall not be construed to require payment to subcontractors of retainage released to a contractor pursuant to an agreement with the procurements officer pursuant to HRS Section 103-32.2.”

Section 9.7 - Final Payment. Add the following paragraph:

“Where Federal funds are involved, it is covenanted and agreed by and between the parties that the Federal share of funds for this project will be paid the Contractor only out of the Federal funds when the payment share of the Federal funds shall be received from the Federal Government, and that this contract shall not be construed to be a general agreement by the County of Hawai'i to pay said portions of the Federal payment share at all events out of any funds other than those which may be so received from the Federal Government; provided that if the Federal share of the cost of the project is not immediately forthcoming from the Federal Government, the County may advance the Contractor such share of the cost of the completed portions of the work for which funds have been appropriated and allotted by the County.”

7. NONDISCRIMINATION IN COUNTY CONTRACTS (County Executive Order No. 142 of February 11, 2005):

During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor shall comply with all requirements set forth in Federal and State laws and

regulations relative to Title VI of the Civil Rights Act of 1964, as amended, which provide for nondiscrimination in Federally assisted programs.

b. The Contractor shall not discriminate against any employee or applicant for employment because of race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law. The Contractor shall assure that applicants are employed and that employees are treated during employment without regard to race, ancestry/national origin, religion, color, disability, age, marital status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training. The Contractor agrees to post in conspicuous places notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause.

c. The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants shall receive consideration for employment without regard to race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law.

d. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract, this contract may be canceled or suspended in whole or in part and the Contractor may be declared ineligible for further County contracts until such time that the Contractor by satisfactory evidence, in good faith, ceases such discriminatory practices or procedures.

e. The Contractor who subcontracts any portion of the contract shall assure the County that such subcontractor shall abide by the nondiscrimination provisions stated herein and agrees that any subcontractor who is found in violation of such provisions shall subject the principal Contractor's contract with the County to be terminated or suspended pursuant to Subsection d. above.

f. The County may direct any bidder, prospective Contractor or subcontractor to submit a statement in writing signed by an authorized officer, agent, or employee of the contracting party that the signer's practices and policies do not discriminate on the grounds of race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other

classification protected by state or federal law, and that the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions stated herein.

8. REFERENCES:

Specifications or standard plans used as reference include but are not limited to the following:

- a. Standard Specifications for Public Works Construction (September, 1986).
- b. County of Hawai'i, Standards for Water System, 2002.
- c. County of Hawai'i, Department of Public Works Standard Details (September, 1984).

9. PRICE ADJUSTMENT CLAUSE:

The Director will not consider price adjustments for this project.

10. PREFERENCES:

(A) Preference for Hawai'i Products. The bidder's attention is directed to Hawai'i Revised Statutes, Sections 103D-1001, 103D-1001.5, 103D-1002 and 103D-1002.5, and Hawai'i Administrative Rules, Title 3 (Department of Accounting and General Services), Subtitle 11 (Procurement Policy Board), Chapter 124 (Preferences), Subchapter 1 (Hawai'i Products) which provide for a preference to be applied for the incorporation of certified Hawai'i products, meeting the project's specifications, in its bid.

When a product, certified as a Hawai'i Product, is available and meets the project's specifications (prequalified or as an approved substitution request, as applicable), such product may be used in the performance of the project.

Bidders shall declare their intention(s) to claim the preference for Hawai'i Products on forms furnished by the County for each individual project being bid. When certified Hawai'i products will be used in its bid, the Bidder shall clearly designate the product(s), its (their) corresponding supplier and other information on the form furnished by the County. It is the Bidder's sole responsibility to ensure the form is completely and accurately filled-out prior to submittal. Any Bidder that claims the preference for Hawai'i products in its bid and is awarded a contract are required to immediately notify the Director in writing of any change that materially affects its ability to supply the Hawai'i products incorporated in its bid. The parties shall enter into discussions for the purposes of revising the contract or terminating the contract for convenience.

At any time during the performance of the work of the Project, the Director may request, and the Contractor shall immediately provide, satisfactory proof of the incorporation of the Hawai'i Products it claimed preference for in its Bid. Proof shall be provided in the form of invoices, bills of lading or other forms satisfactory to the Director. The burden of proof shall rest solely with the Contractor and all costs associated with furnishing such shall be borne by the Contractor at no additional cost to the County. If the Director finds that, in the performance of the contract, there has been a failure to comply with the HRS Sections noted above, the contract shall be voidable and the findings shall be referred for debarment or suspension proceedings under section 103D-702, H.R.S.

Any contract awarded or executed in violation of Section 103D-1002, HRS, shall be void and no payment shall be made on account of such contract.

The preference for Hawai'i products shall not apply whenever its application is in conflict with conditions for the County, or any subdivision thereof, to receive federal funds or aid.

(B) Preference for Bidders in Apprenticeship Programs. The Bidder's attention is directed to Section 103-55.6 of the Hawai'i Revised Statutes, as enacted by S.B. 19, Act 17, SLH 2009, which provides for a preference for bidders who participate in registered apprenticeship programs. This preference is in the form of a five percent (5%) bid adjustment applied to the Bidder's bid amount and is applicable on public works construction projects with estimated values of \$250,000 or greater, unless it is in conflict with any Federal Law or if it would disqualify any County Agency from receiving federal funds or aid.

Upon applying for the Hawai'i Apprenticeship Preference, the Contractor shall certify each month that work is being conducted on the project, that it continues to be a participant in the relevant apprenticeship program for each trade it employs. Said monthly certification shall be made on MONTHLY REPORT OF CONTRACTOR'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (FORM 2) form issued by the DLIR. Failure or refusal of the contractor to submit its monthly certification forms, or at any time during the construction of the project, cease to be a party to a registered apprenticeship agreement for each apprenticeable trade the contractor employs, the Contractor will be subject to the sanctions afforded by law, as determined by the Director."

(C) Preference for Recycled Products. Recycled Products shall not apply to this project.

(D) Evaluation Procedures and Contract Award. For bid evaluation, the Director will evaluate the bids by applying the applicable preferences selected by the bidders according to

the contract. The Director will base the calculations for adjustments upon the original bid prices offered. If more than one preference applies, the evaluated bid price shall be the sum of the original bid price plus applicable preference adjustments.

The Director will award the contract to the responsible bidder submitting the responsive bid with the lowest evaluated bid price.

The amount of the contract awarded shall be the original bid price offered exclusive of any preference.

11. FORUM SELECTION CLAUSE:

No action or proceeding involving this contract shall be commenced by either party except in the Circuit or District Courts of the Third Circuit, County of Hawai'i, State of Hawai'i; nor shall any action commenced in such court be removed or transferred to any other state or federal court.

12. RESPONSIBILITY OF OFFERORS

Offeror is advised that if awarded a contract under this solicitation, Offeror shall, upon award of the contract, furnish proof of compliance with the requirements of §103D-310(c), HRS:

1. Chapter 237, tax clearance;
2. Chapter 383, unemployment insurance;
3. Chapter 386, workers' compensation;
4. Chapter 392, temporary disability insurance;
5. Chapter 393, prepaid health care; and
6. One of the following:

a. Be registered and incorporated or organized under the laws of the State, hereinafter referred to as a "Hawai'i business"; **or**

b. Be registered to do business in the State, hereinafter referred to as a "compliant non-Hawai'i business."

Refer to the Award of Contract provision herein for instructions on furnishing the documents that are acceptable to the State as proof of compliance with the above-mentioned requirements.

BID PREPARATION

Proposal. Offeror is requested to submit its offer using Offeror's exact legal name as

registered with the Department of Commerce and Consumer Affairs, if applicable; and to indicate exact legal name in the appropriate space on the Proposal. Failure to do so may delay proper execution of the contract.

The authorized signature shall be an original signature in ink. If unsigned or the affixed signature is a facsimile or a photocopy, the offer shall be automatically rejected unless accompanied by other material, containing an original signature, indicating the Offeror's intent to be bound.

Hawai'i business. A business entity referred to as a "Hawai'i business" is registered and incorporated or organized under the laws of the State of Hawai'i.

Compliant non-Hawai'i business. A business entity referred to as a "compliant non-Hawai'i business" is not incorporated or organized under the laws of the State of Hawai'i but is registered to do business in the State.

AWARD OF CONTRACT

Method of Award. Award, under an IFB, shall be to the responsive, responsible offeror submitting the lowest bid. If an award is made for an RFP, it shall be to the responsive, responsible Offeror whose proposal is determined in writing to provide the best value to the County taking into consideration price and the evaluation criteria of the RFP.

Responsibility of Lowest Responsive Bidder.

References §3-122-112, Hawai'i Administrative Rules and Hawai'i Revised Statutes, §103D-301(c), Responsibility of Offerors. If the proof of compliance documents have not been submitted to the purchasing agency prior to award, the lowest responsive Offeror shall produce documents to the procurement officer to demonstrate compliance with this section.

Effective July 1, 2011, the Governor of Hawai'i signed Act 190 into law, which requires compliance documentation for awards of \$2,500 or more:

All contractors doing business with the State of Hawai'i or County of Hawai'i are required to comply with all applicable statutes, administrative rules and procedures. State or County agencies must verify compliance prior to award and for final payment. Acceptable verification is through Hawai'i Compliance Express (HCE). Contractors wishing to do business with the State or County must register in HCE and be in compliance.

Hawai'i Compliance Express provides a contractor's proof of compliance for the following:

- Certificate of Good Standing (COGS) from the Department of Commerce and Consumer Affairs (DCCA) Business Registration Division
- Tax clearances (federal and state) from the Department of Taxation (DOTAX)
- Compliance with HRS Chapters 383 Hawai'i Employment Security Law (Unemployment Insurance), 386 Worker's Compensation Law, 392 Temporary Disability Insurance and 393 Prepaid Healthcare Act from the Department of Labor and Industrial Relations (DLIR)

There is a nominal fee to subscribe to HCE. Contractors can register with Hawai'i Compliance Express at <http://vendors.ehawaii.gov>. Please note that it may take approximately two weeks to establish a vendor account. If you have questions during the registration process, call the Hawai'i Information Consortium (HIC) staff at (808) 695-4620.

Timely Submission of all Certificates. The "compliant" Hawai'i Compliance Express certificate should be applied for and submitted to the purchasing agency as soon as possible. If a valid certificate is not submitted on a timely basis for award of a contract, an offer otherwise responsive and responsible may not receive the award.

Final Payment Requirements. Contractor is required to submit a tax clearance certificate or a "compliant" Hawai'i Compliance Express certificate, not more than two (2) months from the date of issuance, for final payment on the contract. The tax clearance certificate or the Hawai'i Compliance Express certificate must be valid on the date it is received by the purchasing agency.

Revised: 06/14/2016

SECTION 01000

GENERAL REQUIREMENTS

PART 1 - GENERAL INFORMATION

1.01 PROJECT DESCRIPTION

- A. A brief description of the work is stated in the Notice to Bidders and Section 01010, Summary of Work. To determine the full scope of the project or any particular part of the project, coordinate the applicable information in the several parts of these Contract Documents.

1.02 GENERAL REQUIREMENTS

A. General Requirements and Covenants

1. The General Requirements and Covenants of the Department of Public Works, County of Hawai'i (July 1972) and the Standard Specifications for Public Works Construction (September 1986) shall be applicable and incorporated herein and made a part of these specifications.
2. Said Requirements and Covenants and Specifications are not physically included, but are included by reference. Copies are available for purchase at the Department of Public Works Engineering Division during regular business hours of the County.

B. Standard Details

1. The Standard Details for Public Works Construction, Department of Public Works, County of Hawai'i, September 1984, where applicable, shall be incorporated herein and made a part of these specifications.
2. Said Standard Details are on file and may be inspected and/or purchased at the Department of Public Works Engineering Division during regular business hours of the County.

C. Specifications

1. The following articles shall and do hereby apply to each and every section of the Specifications as though fully contained therein:

a. Trade Distinctions

- i. For convenience of reference and to facilitate letting of subcontracts, these Specifications are separated into Sections. Such separations shall not operate to make the Engineer an arbiter or to establish subcontract limits between the Contractor and Subcontractor. Sections in these specifications conform roughly to the customary trade practice. They are used for convenience only. The Engineer is

not bound to define the limits of any subcontract.

- ii. Grouping of items of work in divisions of technical specifications is not intended as assignment to a specific subcontractor or trade union.

b. Work Included

- i. Each specification section shall imply the furnishing of all labor, and materials, required for the complete installation of the subject work unless specifically stated otherwise in the specific section of the Specifications.

c. Related Work Specified in Other Sections

- i. Considered to apply wherever it is properly implied in any particular section whether specifically stated or not.

d. Codes and Standards

- i. Any reference in the specifications text to codes, standard specifications or manufacturer's instructions shall mean the latest printed edition of each in effect at the contract date.

e. Building Laws

- i. Not applicable to this project.

f. Laws and Permits

- i. The Contractor shall comply with the local laws, ordinances, rules and regulations bearing on the work, and he must obtain and pay for all permits, licenses, certificates, and give all notices which may be required.
- ii. In the event that the County secures project permits prior to award of the Contract, the Contractor shall be responsible for compliance with all permit conditions and submittal of additional documents which may be required under the conditions of the permit.

PART 2 - MATERIAL, EQUIPMENT AND WORKMANSHIP

2.01 GENERAL

- A. Unless otherwise specifically stated in the contract documents, the Contractor shall provide and pay for materials, labor, tools, equipment, water, light, power, transportation, supervision, and temporary construction of any nature, and other services and facilities of any nature, whatsoever necessary, to execute, complete and deliver the work within the specified time.

- B. Material and equipment shall be new and of a quality equal to that specified. Equipment offered shall be current models, which have been in successful regular operation under comparable conditions. This requirement does not apply to minor details, or to thoroughly demonstrate improvements in design or in materials of construction.
- C. Construction work shall be executed in conformity with the standard practice of each trade.

2.02 QUALITY

- A. Where the contract requires that materials or equipment be provided or that construction work be performed, and detailed specifications of such materials, equipment or construction work are not set forth, the Contractor shall perform the work using materials and equipment of the best grade in quality and workmanship obtainable in the market, from firms of established good reputations, and shall follow standard practices in the performance of construction work. The work performed shall be in conformity and harmony with the intent to secure the standard of construction and equipment of work as a whole and in part.

2.03 MATERIAL AND EQUIPMENT SPECIFIED BY NAME

A. General

- 1. When material or equipment is specified by reference to one or more patents, brand names, or catalog numbers, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other materials or equipment, of equal capacities, quality and function shall be considered by the County upon the Contractor's request for substitution.
- 2. Requests for substitution shall be made in accordance with the General Requirements and Covenants, County of Hawai'i, Department of Public Works, 1972, as amended.

B. Single Source Products

- 1. If material or equipment is specified by only one patent or proprietary name, or by the name of only one manufacturer, it is for the purpose of standardization, or because the County knows of no equal. If standardization is the reason for using one name to specify any material or equipment, the specifications will so state, and substitutions will not be considered. In other cases, the Contractor may offer substitutions of products considered to be equal to that specified in accordance with Section 2.03.A.

C. Specified Articles or Equal Clause

- 1. In order to establish a basis of quality, certain materials or articles may be specified by designating a particular manufacturer's name, brand, or number. It is not the intent of the specifications to exclude other materials or articles that measure up to the standards of those specified. Whenever an article is

specified by giving the manufacturer's name, it is understood that the words "or equal" follow thereafter.

2. Should the Contractor desire to make any substitutions, substitutions shall be requested in accordance with Section 2.03.A.

2.04 DEMONSTRATION OF COMPLIANCE WITH CONTRACT REQUIREMENTS

A. Inspection

1. To demonstrate his compliance with the contract requirements, the Contractor shall assist the Engineer in his performance of inspection work.
2. The Contractor shall grant the Engineer access to the work and to the site of the work, and to the places where work is being prepared, or where materials, equipment or machinery are being obtained for the work. The Contractor shall provide information requested by the Engineer in connection with inspection work.
3. If the contract documents, laws, ordinances, or any public regulatory authority require parts of the work to be specially inspected, tested or approved, the Contractor shall give the Engineer adequate prior written notice of the availability of the subject work for examination.
4. If parts of the work are covered in the absence of the Engineer and contrary to the Engineer's directive, the cost of exposing the work for inspection and closing shall be borne by the Contractor regardless of whether or not the work is found to be in compliance with the contract.

B. Samples of Materials

1. The Contractor shall provide samples to the Engineer in accordance with Section 01300, Submittal Procedures.

C. Certification

1. In cases where compliance of materials or equipment to contract requirements is not readily determinable through inspection and tests, the Engineer shall request that the Contractor provide properly authenticated documents, certificates or other satisfactory proof of compliance. These documents, certifications and proofs shall include performance characteristics of materials.

D. Inspection at Point of Manufacturing:

1. Not required for this project.

2.05 MANUFACTURER'S DIRECTIONS

- A. Manufactured articles, material and equipment shall be applied, installed, connected, erected, adjusted, tested, operated and maintained as recommended by the manufacturer, unless otherwise specified.
- B. Manufacturer's installation instructions and procedures shall be provided prior to installation of the manufactured articles, material and equipment.

2.06 SPECIAL TOOLS

- A. Not required for this project.

2.07 PROTECTION AGAINST ELECTROLYSIS

- A. Not required for this project.

2.08 CORRECTION OF DEFECTIVE WORK

- A. When, and as often as the Engineer determines through his inspection procedures, material, equipment or workmanship incorporated in the project do not meet the requirements of the contract, the Engineer shall give written notice of the noncompliance to the Contractor.
- B. Within five (5) days from the receipt of such notice, the Contractor shall undertake the work necessary to correct the deficiencies, and to comply with the contract.
- C. If the Contractor disagrees with the Engineer's determination and believes that the corrective work should be covered by a change order, he shall immediately notify the, Engineer, in writing, setting forth his position.
- D. Within ten (10) days after receipt of the Contractor's notification, the Engineer will review the matter and notify the Contractor, in writing, of his determination.
- E. If the Engineer determines that the corrective work is required in order to comply with the contract, the Contractor shall proceed with such work.
- F. As a condition precedent to the Contractor's request for either additional compensation or time extension, or both, resulting from the performance of such corrective work, the Contractor shall within 15 calendar days after receipt of the Engineer's determination, notify the Engineer in writing of his intent to claim additional compensation, time or both.
 - 1. The written notification to the Engineer shall be submitted prior to the performance of any and all corrective work.
 - 2. The Contractor shall document the cost information associated with the corrective work with daily records and shall provide such information to the Engineer monthly. Receipt of the cost data by the Engineer shall not be construed to be an acceptance of the corrective work, or an authorization for a change order to cover the corrective work.

PART 3 - SITE CONDITIONS

3.01 SITE INVESTIGATION AND REPRESENTATION

- A. By submission of his Bid, the Contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, access to the site, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, river stages, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract.
- B. The Contractor further acknowledges that he has satisfied himself as to the character, quality, and quantity of surface and subsurface materials to be encountered from his inspection of the site and from reviewing any available records of exploratory work furnished by the County. Failure by the Contractor to acquaint himself with the physical conditions of the site and all the available information will not relieve him from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The Contractor warrants that as a result of his examination and investigation of all the aforesaid data that he can perform the work in a good and workmanlike manner and to the satisfaction of the County.
- D. The County assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the County.
- E. The Contractor shall be responsible to address, to the satisfaction of the Engineer, any unforeseen conditions encountered at no additional cost to the County.

3.02 INFORMATION ON SITE CONDITIONS

- A. Any information obtained by the County and specifically referenced in the Contract Documents regarding site conditions, subsurface information, ground-water elevations, construction of existing site facilities as applicable, and similar data will be available for inspection at the office of the County upon request.
- B. Such information is offered as supplementary information only. Neither the Engineer nor the County assumes any responsibility for the completeness or interpretation of such supplementary information.
- C. Underground Utilities
 - 1. Known utilities and structures adjacent to or expected to be encountered in the work are shown on the Drawings. The locations shown are taken from existing records; however, it is expected that there may be some

discrepancies and omissions in the locations and quantities of utilities and structures shown.

2. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either the County or the Engineer for their accuracy or completeness.

3.03 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Where the Contractor's operations could cause damage or inconvenience to telephone, power, water, sewer, or irrigation systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the Contractor.
- B. Notify all utility offices which are affected by the construction operation at least 48 hours in advance. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities.
- C. The Contractor shall be solely and directly responsible to the County and operators of such properties for any damage, injury, expense, loss inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.
- D. Neither the County nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.

3.04 MAJOR UTILITIES SERVING THE AREA OF WORK

- A. The following is a list of the major utilities serving the work area indicating the name of the responsible authority of the various utilities which should be notified as required if conflicts or emergencies arise during the progress of the work:

| <u>Utility</u> | <u>Agency</u> | <u>Phone</u> |
|----------------|--|--------------|
| Sewer | Wastewater Division | 961-8338 |
| Water | Department of Water Supply | 961-8790 |
| Electricity | HELCO | 935-6666 |
| Gas | GASCO, Inc (The Gas Company) | 935-0021 |
| County roads | Highway Division, County of Hawai'i | 961-8636 |
| State Harbors | Division of Boating and Ocean Recreation | 327-3690 |
| State Highways | State of Hawai'i, Department of Transportation | 933-8866 |

3.05 INTERFERING STRUCTURES

- A. Take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground. An attempt has been made to show major structures on the Drawings. The completeness and accuracy of information shown cannot be guaranteed, and it is presented simply as a guide to avoid known possible difficulties.
- B. Protect underground and aboveground existing structures from damage, whether or not they lie within the limits of the work.
- C. Without additional compensation and with the consent of the Engineer, the Contractor may remove and replace in a condition as good as or better than original, such small miscellaneous structures as fences, mailboxes, and signposts that interfere with the Contractor's operations.

3.06 FIELD RELOCATION

- A. During the progress of construction, it is expected that minor relocation of the work will be necessary. Such relocation shall be made only by direction of the Engineer.
- B. If existing structures and utilities are encountered which prevent the construction, and which are not shown on the Drawings, notify the Engineer before continuing with the construction in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures and utilities.
- C. If the Contractor shall fail to so notify the Engineer when an existing structure and utility is encountered, and shall proceed with the construction despite this interference, he shall do so at his own risk.

3.07 DIMENSIONS OF EXISTING STRUCTURES

- A. Where the dimensions and locations of existing structures are of importance in the installation or connection of any part of the work, the Contractor shall verify such dimensions and locations in the field before the fabrication of any material or equipment which is dependent on the correctness of such information.

3.08 OBSTRUCTIONS

- A. The Contractor shall remove all obstructions, the removal of which shall be necessary for the proper reception, performance, construction, installation, and completion of all work under this contract, as called for or implied in the plans and specification.

3.09 MEASUREMENTS

- A. Figured dimensions and drawings take precedence over measurements by scale, and detail drawings over general drawings. The Contractor must verify all measurements at the site and be responsible for the accuracy of the same.

PART 4 – WORK HOURS AND CONSTRUCTION PROGRESS

4.01 HOURS OF LABOR

- A. Work hours and work days for this project have been established as Monday thru Friday with eight (8) work hours per day. No work shall be done in excess of the established work days and work hours, or legal holidays of the County government without the written consent of the Engineer.

4.02 CONSTRUCTION PROGRESS

A. Definitions:

1. Avoidable Delays: Avoidable delays in the prosecution of the work shall include delays which could have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor or his subcontractors. Avoidable delays include:
 - a. Delays which may in themselves be unavoidable but which affect only a portion of the work and do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the contract time.
 - b. Time associated with the reasonable interference of other contractors employed by the County which do not necessarily prevent the completion of the whole work within the contract time.
2. Unavoidable Delays: Unavoidable delays in the prosecution or completion of the work shall include delays which result from causes beyond the control of the Contractor and which could not have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor or his subcontractors.
 - a. Delays in completion of the work of other contractors employed by the County under separate contracts will be considered unavoidable delays insofar as they interfere with the Contractor's completion of the work.
 - b. Delays caused by acts of God, fire, unusual storms, floods, tidal waves, earthquakes, strikes, labor disputes, freight embargoes and shortages of materials shall be considered as unavoidable delays insofar as they prevent the Contractor from proceeding with at least seventy-five percent (75%) of the normal labor and equipment force for at least five hours per day toward completion of the current controlling item on the accepted critical path schedule.
 - c. Should abnormal conditions prevent the work from beginning at the usual starting time, or prevent the Contractor from proceeding with seventy-five percent (75%) of the normal labor and equipment force for a period of at least five hours per day, and the crew is dismissed as a result thereof, he will not be charged for a working day whether or not conditions change so

that the major portion of the day could be considered to be suitable for work on the controlling item.

B. Schedule Modifications:

1. The Contractor shall furnish such manpower, materials, facilities and equipment as may be necessary to insure the prosecution and completion of the work in accordance with the accepted schedule.
2. It is further understood and agreed that none of the services performed by the Engineer in monitoring, reviewing and reporting project status and progress shall relieve the Contractor of responsibility for planning and managing construction work in conformance with the construction schedule.
3. If work falls 14 days or more behind the accepted construction schedule, the Contractor agrees that he will take some or all of the following actions to return the project to the accepted schedule. These actions may include the following:
 - a. Increase manpower in quantities and crafts.
 - b. Reschedule activities: If requested by the Engineer, the Contractor shall prepare a proposed schedule revision demonstrating a plan to make up the lag in progress and insure completion of the work within the contract time. The proposed revision shall be submitted to the Engineer. Upon receipt of an acceptable proposed schedule, the revision to the construction schedule shall be made in accordance with the Section 01310, Construction Schedule.

C. Contractor's Responsibilities:

1. Avoidable Delays: All actions to return the project to the accepted schedule are at the Contractor's expenses.
 - a. The Contractor shall pay all costs incurred by the County which result from the Contractor's action to return the project to its accepted schedule. Contractor agrees that County shall deduct such charges from payments due the Contractor.
2. Unavoidable Delays: For delays which the Contractor considers to be unavoidable, he shall submit to the Engineer complete information demonstrating the effect of the delay on the controlling operation in his construction schedule.
 - a. The submission shall be made within the end of the following working day of the occurrence, which is claimed to be responsible for the unavoidable delay.
 - b. The Engineer shall review the Contractor's submission and determine the number of days unavoidable delay and the effect of such unavoidable delay on controlling operations of the work. The County agrees to grant an

extension of time to the extent that unavoidable delays affect controlling operations in the construction schedule. During such extension of time, neither extra compensation or engineering inspection and administration nor damages for delay will be charged to the Contractor.

- c. It is understood and agreed by the Contractor and County that time extensions due to unavoidable delays will be granted only if such unavoidable delay involves controlling operations which would prevent completion of the whole work within the specified contract time.

PART 5 – PAYMENT

5.01 MEASUREMENT AND PAYMENT

- A. Measurement and payment items as indicated and specified within the Standard Specifications are hereby deleted and shall not be applicable to this contract unless otherwise specified.
- B. Measurement and payment shall be as specified in Bid Items included in the Proposal and shall include all work, in place complete, including labor, material, equipment, tools, testing and incidental items.

5.02 EXTRA WORK

- A. No work of any kind in connection with the work covered by these specifications and plans shall be considered as extra work, or entitles the Contractor to extra compensation, except when the work has been ordered in writing by the Engineer, and specifically referred to as EXTRA WORK and the amount of compensation stated in the order.

PART 6 – SUPERVISION AND WORK COORDINATION

6.01 SUPERVISION AT THE JOB SITE

- A. The Contractor shall be or have in person on the job site or be represented by a responsible agent with authority to act for the Contractor in connection with the contract during the performance of the contract.
- B. The Contractor shall file with the Engineer a written statement signed by the Contractor giving the names of any and all foremen and employees who are authorized to act in place of the Contractor. Any communications signed on behalf of the Contractor by such agents shall bind the Contractor.

6.02 SUBCONTRACTORS

- A. Under the terms of this contract, no subcontractor will be recognized by the County. The subcontractor's dealings shall be with the Contractor; however, each and every subcontractor shall manage and take care of his materials and waste, as part of the work to be performed by him.

- B. The County of Hawai'i will hold the Contractor responsible for all acts of a subcontractor, and it will deal only with the Contractor in any matter that may affect a subcontractor.

6.03 COORDINATION WITH OTHER CONTRACTORS

- A. The Contractor shall coordinate his work with that of other contractors in the area and shall cooperate in the arrangements for storage of materials, scheduling of work, and scheduling of vehicular traffic patterns.

PART 7 - DISPOSITION OF MATERIALS

7.01 RESPONSIBILITY FOR SALVAGE AND PROTECTION OF EQUIPMENT AND MATERIALS REMOVED.

- A. The equipment and material to be salvaged as the work proceeds, shall be removed with extreme care so as not to damage it for future use. Equipment shall be cleaned and protected from dirt and the elements, and stored on site as directed.
- B. Materials and equipment shall be stored and protected in accordance with the requirements of Section 01620. Temporary storage facilities may be erected at the project site for protection of materials and equipment with written permission from the Engineer.
- C. The Contractor shall be responsible for the security of the equipment and material until accepted by the County.
- D. Prior to dismantling equipment or piping, the Contractor shall confer with the County and the Engineer. The Engineer will indicate the locations where equipment is to be disconnected. Damage caused by the Contractor to equipment or material specified or indicated on the Drawings to be salvaged shall be replaced or repaired by the Contractor, at the Contractor's own expense.

7.02 MATERIAL TO BE SALVAGED

- A. Salvage work shall be considered incidental to the lump sum work or unit price work as applicable, and the Contractor's cost shall be included in the applicable items of work in the Proposal. Material to be salvaged shall be delivered to the location specified by the Engineer.

7.03 DISPOSAL OF UNSUITABLE MATERIAL

- A. All surplus rock, boulder and soil that cannot be incorporated in the work shall be disposed of at the cost of the Contractor.

PART 8 - TEMPORARY CONSTRUCTION UTILITIES AND FACILITIES

8.1 TEMPORARY WATER

- A. The Contractor shall make his own arrangements to provide a separate meter and piping for transporting water to the work, if so required.
- B. The Contractor shall notify the Engineer if there is any water shut-off prior to installing plumbing work. At the completion of the work, Contractor shall remove all temporary facilities at his own expense.

8.2 TEMPORARY ELECTRIC POWER

- A. The Contractor shall provide Temporary Electrical power at his expense.

8.3 SAFETY REQUIREMENTS FOR TEMPORARY ELECTRIC POWER

- A. Temporary electric power installation shall meet the construction safety requirements of OSHA, State, the serving Utility, and any other applicable governing agencies.

8.4 SANITARY FACILITIES

- A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractors' employees, and on-site County personnel that will comply with the regulations of the local and State Departments of Health and as directed by the Engineer.

PART 9 - MOBILIZATION

9.01 DESCRIPTION

- A. Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the acquisition of false work materials; for the establishment of all offices; buildings and other facilities, excluding field office and project site laboratories; necessary for work on the project; and for all other work and operations which must be performed, or costs incurred, prior to beginning work on the various items on the project site.

9.02 APPLICABILITY

- A. Unless stated in the Proposal or Measurement and Payment, the maximum bid allowed for this item is an amount not to exceed six (6) percent of the total original contract amount excluding the bid price of this item.
 - 1. If the proposal submitted by the bidder indicates an amount in excess of the allowable maximum, the indicated amount or amounts shall be reduced to the allowable maximum; the "TOTAL SUM BID" in the proposal schedule shall be adjusted to reflect any such reduction.

2. For the purposes of comparing bids and determining the contract price to be inserted in the contract awarded to the bidder, if any is so awarded, the "TOTAL SUM BID" adjusted in accordance with the foregoing shall be used and the bidder's proposal shall be deemed to have been submitted for the amounts as reduced and adjusted in accordance herewith.

9.03 BASIS OF PAYMENT

- A. Mobilization and demobilization will be paid for on a lump sum basis.
 1. When 10 percent of the original contract amount is earned, 50 percent of the amount bid for mobilization and demobilization will be paid.
 2. When 50 percent of the original contract amount is earned, 90 percent of the amount bid for mobilization and demobilization will be paid.
 3. When 100 percent of the original contract amount is earned, 100 percent of the amount bid for mobilization and demobilization will be paid.
 4. Nothing herein shall be construed to limit or preclude partial payment otherwise provided for by the Contractor.

PART 10 - PRESERVATION, RESTORATION, AND CLEANUP

10.01 SITE RESTORATION AND CLEANUP

- A. At all times during the work, keep the premises clean and orderly, and upon completion of the work, repair all damage caused by equipment and leave the project free of rubbish or excess materials of any kind.

10.02 STREET CLEANUP DURING CONSTRUCTION

- A. Thoroughly clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all public streets and roads at the conclusion of each day's operation.

10.03 PROTECTION OF PROPERTY

- A. The Contractor shall take all necessary precautions during the progress of the work to protect adjoining property from damage and injury, and he shall promptly make good such damages to adjoining property.
- B. The Contractor shall repair to the entire satisfaction of the County Engineer all damages to existing streets, sidewalks, or other public property at his own expense.

10.04 DUST PREVENTION

- A. The Contractor shall perform his work in such a manner as to avoid dust problems. Whenever visual observation of dust is detected by the Contractor or

Engineer outside the property boundary, a dust problem is considered to exist. The Contractor shall take immediate action to alleviate this problem.

- B. Give all unpaved streets, roads, detours, or haul roads used in the construction area an approved dust-preventive treatment or periodically water to prevent dust. Applicable environmental regulations of the State Department of Health for dust prevention shall be strictly enforced.

10.05 NOISE CONTROL

- A. Between 7:30 p.m. and 7:00 a.m., noise from Contractor's operations shall not exceed limits established by State Department of Health regulations and in no event shall exceed 86 dBA at a distance of 50 feet from the noise source.

10.06 STRUCTURES RESTORATION

- A. The Contractor shall remove such existing structures, including curbs, gutters, pipelines and utility poles, as may be necessary for the performance of the work and shall rebuild the structures' thus removed in as good a condition as found. He shall also repair existing structures which may be damaged as a result of the work under this contract at his own expense.

10.07 ROADS AND STREETS RESTORATION

- A. Unless otherwise specified, roads and streets in which the surface is removed, broken, or damaged, or in which the ground has caved or settled during the work under this contract, shall be resurfaced and brought to the original grade and section.
- B. Roadways used by the Contractor shall be cleaned and repaired. Before resurfacing material is placed, edges of pavements shall be trimmed back far enough to provide clean, solid, vertical faces, and shall be free of loose material. Repair work shall conform to the paving specifications.

10.08 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS

- A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored as nearly as possible to their original condition at the Contractor's expense.
- B. Existing guard posts, barricades, and fences shall be protected and replaced if damaged. Replacement costs shall be borne by the Contractor.

10.09 POLLUTION CONTROL

- A. Throughout the entire construction period, the Contractor shall effectively maintain pollution control in accordance with Act 105, Section 1, Chapter 103 of the Hawai'i Revised Statutes, as amended.

10.10 DAILY JOB SITE CLEAN UP

- A. On completion of the work of each and every section of these specifications, or by each trade, on a daily basis, remove from the site all debris, tools and excess material resulting from the work and leave the area of the work and any affected surroundings broom clean.

10.11 FINAL CLEAN UP

- A. As a condition precedent to final acceptance or release of a structure, space or process unit for use by the County, the Contractor shall thoroughly clean all work areas.

PART 11 - CERTIFIED PAYROLLS

11.01 Weekly Submittal:

- A. As required by Section 104-3, Hawai'i Revised Statutes, a certified copy of all payrolls shall be submitted weekly to the Engineer. The General Contractor shall be responsible for the submission of certified copies of the payrolls of all subcontractors.

11.02 Monthly Submittal:

- A. Monthly progress payments will not be processed without supporting certified payrolls.

PART 12 – WAGES AND CONDITIONS OF EMPLOYMENT

- 12.01 The Contractor shall pay all employees on this contract a minimum basic wage in conformance with current Federal and State laws.
- 12.02 The rate of pay in effect at the time of the printing of these Special Provisions are posted in the office of the Division of Purchasing, Department of Finance and copies are available from the State of Hawai'i Department of Labor and Industrial Relations.
- 12.03 The State Wage Rate Schedule is subject to change at any time by the Department of Labor and Industrial Relations. Any increase in wage rates issued in the wage rate schedule, shall be applicable during the performance of the Contract, in accordance with Section 104-2(a) and (b), Hawai'i Revised Statutes.

PART 13 – SUBCONTRACTING:

- 13.01 The Contractor shall not subcontract any part of the contract except to those subcontractors specifically listed in the bid submitted by the Contractor; provided, however, the Contractor may for good cause and upon written approval of the Contracting Officer engage other subcontractors. A subcontractor and his employees

shall be considered employees of the Contractor. Engaging subcontractors to perform the work under the contract shall not relieve the Contractor of his duty to perform the work under the contract and shall not relieve the Contractor of his duty to perform the contract in accordance with the terms, covenants, conditions, provisions and intent thereof.

- 13.02 The Contractor shall replace the subcontractor when required by the Engineer for not performing the contract in accordance with the terms, covenants, conditions, provisions and intent thereof.
- 13.03 The Contractor shall ensure he has reviewed the requirements of this project and has determined the appropriate licensing requirements for performance of the work. Refer to Special Notice to Bidders.

PART 14 - GUARANTEE

- 14.01 The Contractor guarantees all materials and equipment furnished to be in operable condition upon final acceptance of the work and that all such materials and equipment conform to the requirements of this contract and be fit for the use intended.
- 14.02 The Contractor further guarantees all such materials and equipment against defects and poor workmanship and, to the extent that he is responsible for design, the Contractor guarantees the design to meet the criteria and operating requirements specified against failure to perform in accordance with such criteria and operating requirements.
- 14.03 The period of this guarantee shall commence upon final acceptance of the work by the County, and shall extend through the project performance evaluation period not to exceed 2 years, unless otherwise specified herein, for all materials and equipment, provided that this period shall be extended from the time of correction of any defect or failures, corrected under the terms of this guarantee, for a like period for the corrected work.
- 14.04 The Contractor shall correct all defects or failures discovered within the guarantee period.
 - A. The County will give the Contractor prompt written notice of such defects or failures following their discovery.
 - B. The Contractor shall commence corrective work within 10 days following notification and shall diligently prosecute such work to completion.
 - C. The Contractor shall bear all costs of corrective work, which shall include necessary disassembly, transportation, reassembly and retesting, as well as repair or replacement of the defective material or equipment, and any necessary disassembly and reassembly of adjacent work.

- 14.05 If the Contractor fails to perform corrective work in the manner and within the time stated, the County may proceed to have such work performed at the Contractor's expense and his sureties will be liable therefore. The County shall be entitled to reasonable attorney's fees and court costs necessarily incurred by the Contractor's refusal to honor and pay such costs of corrective work.
- 14.06 The Contractor's performance bond shall continue in full force and effect during the period of this guarantee.
- 14.07 The rights and remedies of the County under this provision do not preclude the exercise of any other rights or remedies provided by this contract or by law with respect to unsatisfactory work performed by the Contractor.
- 14.08 This guarantee shall be deemed supplemental to guarantee provisions provided in other sections of the specifications for the individual units and systems of units so specified.

PART 15 – WORK ON PUBLIC ROADWAYS

- 15.01 Work that will be completed on State and County Public Roadways. Permissions and applicable permits shall be procured from the appropriate agencies.

PART 16 – ACKNOWLEDGEMENT OF THIRD PARTY LIABILITY

- 16.01 No officer or employee shall accept on behalf of the County a construction project unless and until the Contractor has submitted in writing to the Officer-in-Charge or the Director of Finance that the Contractor has accepted and acknowledged all claims for liabilities related to the construction project.

****END OF SECTION****

SECTION 01010

SUMMARY OF WORK

1.01 Project Description:

This project includes all labor, materials, equipment, services, and incidentals required for the expansion of the Gas Collection and Control System (GCCS) at the West Hawai'i Sanitary Landfill (WHSL) located in Pu'uana'hulu. The work includes but is not limited to:

- A. Mobilization and demobilization of equipment.
- B. Installation of new gas extraction wells Cells 9, 10 and 11.
- C. Installation of new wellheads.
- D. Connecting the existing GCCS header to the new header.
- E. All incidentals, appurtenances to complete work in place.

Contractor shall refer to the plans and technical specifications for all work to be performed.

****END OF SECTION****

SECTION 01060

SAFETY AND HEALTH

1.01 GENERAL

The Contractor shall be experienced and qualified to anticipate and meet the safety and health requirements of this project.

2.01 DRUG FREE POLICY

The Contractor and all subcontractors shall certify that a drug-free workplace shall be provided and maintained for the duration of the project. Such certification shall be submitted within ten (10) days of the Contract Award.

3.01 SAFETY AND HEALTH REGULATIONS

- A. The Contractor shall comply with the standards of the Occupational Safety and Health Administration (OSHA) and all applicable Federal, State, and County laws and regulations relating to safety in the performance of the work.
- B. The Contractor shall comply with the State laws and standards regarding a safe place of employment and safe practices, and shall do everything reasonable and necessary to protect the life, safety, and health of all personnel involved in the project, as well as the affected general public.
- C. Strict compliance with all safety requirements will be enforced. Primary concern is safety of the Contractor's employees, the County, Engineer and his representatives, the representatives of the State of Hawai'i, the Architect-Engineer, as well as the affected general public. Safety related directions and/or orders by the Engineer or his representatives shall not be construed as relieving the Contractor of his sole responsibility for safety.
- D. Safety clothing and equipment must be worn at all times.
- E. The Contractor shall put emphasis in the following:
 - 1. Equipment must be provided with the necessary warning devices and signs.
 - 2. Specialized Training: Refer to LFG Header and Lateral Pipelines Section and Landfill Gas Vertical Well Installation Section.
- F. The Engineer will notify the Contractor of any non-compliance with environmental pollution control or with safety standards, of any safety violations, and the action to be taken. If the Contractor fails or refuses to comply promptly, the Engineer may issue an order in writing to stop the work or any portion thereof, until satisfactory corrective actions have been taken. The right to stop the work shall not be construed as creating a duty on the part of

the Engineer to exercise this right for the benefit of the Contractor or any other person nor as an assumption of responsibility for the Contractor's administration, implementation, or enforcement of safety on the job site. No extension of time or payment for excess costs or damages shall be made for the time lost due to such stop action. All costs incurred to provide compliance shall be borne by the Contractor.

4.01 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

- A. Representatives of the Federal Government, State of Hawai'i, and the County of Hawai'i shall have access to the work whenever it is in preparation or progress. Contractor shall provide proper facilities for such access and inspection.
- B. Representatives of the Federal Government, State of Hawai'i, and the County of Hawai'i shall have access to any and all records of the Contractor during the progress and up to 3 years after completion and acceptance of said project.

5.01 ACCIDENT REPORTS

- A. If death or serious injuries or serious damages occur, the accident shall be reported immediately by telephone or messenger to the Engineer. In addition, the Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.
- B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

6.01 BARRICADES

- A. The Contractor shall erect, install, and maintain all temporary public walks, warning signs, barricades, or other protective means around the construction site as may be ordered by the Engineer, for the effectual protection of the public or of workmen employed on the project.

****END OF SECTION****

SECTION 01100

CWSRF Requirements

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This project is being funded through the Clean Water State Revolving Fund (CWSRF) program. The following Appendices are included as a part of Section 01100.
1. Appendix A – “CWSRF Boilerplate” Federal Requirements for Consultants and Contractors, dated June 2018.
 2. Appendix B - Wage Determination General Decision HI 20200001, Modification 0, dated 01/03/2020
 3. Appendix C - Labor Standards Interview Form, SF-1445.

1.02 FEDERAL “CROSS-CUTTER REQUIREMENTS

- A. All projects funded with CWSRF federal or state funds must comply with all federal requirements listed as applicable “Cross-cutter” requirements in the “Federal Requirements for Consultants and Contractors” contained in Appendix A. The Contractor shall perform all work in accordance with these requirements.

1.03 SUBMITTALS

A. DBE SUBCONTRACTOR PARTICIPATION FORM

Not applicable to this project.

B. MBE/WBE UTILIZATION UNDER FEDERAL GRANTS, COOPERATIVE AGREEMENTS, AND INTERAGENCY AGREEMENTS

1. The County, as CWSRF Loan Recipient, will be required to submit a completed EPA Form 5700-52A (MBE/WBE Utilization Under Federal Grants, Cooperative Agreements, and Interagency Agreements) for the project. Contractor, its subcontractors and suppliers will be required to provide information that is needed to complete the form.
2. Listing of firms currently certified as DBE can be found at <http://hidot.hawaii.gov/administration/ocr/dbe/>

C. ELECTRONIC COPIES OF FORMS

1. Electronic copies of EPA Form 5700-52A in Adobe Acrobat portable document format (pdf) and Microsoft Word document (doc) format are available from the EPA website, http://www.epa.gov/osbp/dbe_contract_admin.htm.

D. DAVIS BACON ACT PREVAILING WAGE

1. Bidders are required to conform to all provisions of the federal Davis-Bacon and Related Acts which require that all laborers and mechanics employed by the contractors and subcontractors performing on the contracts funded in whole or in part in excess of \$2,000 pay their laborers and mechanics no less than the prevailing wages rates and fringe benefits, as determined by the Secretary of Labor.
2. Contractor shall post at the jobsite wage rate posters in a conspicuous place, protected from the weather, in all appropriate languages (English, Spanish, etc.). Posters can be downloaded from <http://www.dol.gov/whd/regs/compliance/posters/fedprojc.pdf>
3. Apprentices must be registered/certified with DOL approved program. Contractor is required to comply with the ratio of apprentice and journey workers.
4. Contractors and subcontractors that have been debarred can not be awarded the contract.
5. Additional information can be found by downloading "Implementing Davis-Bacon Wage Rate Requirements in the SRF Programs 2017"
<http://health.hawaii.gov/wastewater/files/2017/05/dbhandbook.pdf>

E. STATE OF HAWAII PREVAILING WAGE

1. Contractors shall be aware of the differences between the Federal and State of Hawaii prevailing wage requirements. In case of conflict in the classification of workers and wages, the more stringent requirement shall govern.
2. Overtime shall be after 8 hours and not after 40 hours.
3. Work performed on State of Hawaii recognized holidays shall be considered overtime work.

F. LABOR STANDARD INTERVIEW and CERTIFIED PAYROLLS

1. County will interview mechanics and laborers employed by the General Contractor and his subcontractors at the jobsite in accordance with Standard Form 1445. Interviews will be conducted at the beginning, middle and prior to completion of project. Selected employees **must** participate in the wage rate interviews. All information of personal nature will not be included in the interview form.
2. General Contractor and subcontractors shall submit certified payrolls on a weekly basis. Subcontractors shall submit certified payrolls to General Contractor which in turn will submit to the County. General Contractor is responsible for the accuracy of all submittals. Unless hard copy is specifically requested, all certified payrolls shall be submitted in electronic form. File name shall be: Contractor's or subcontractor 3 letter initials space CPXX space DDMMYY. Do not submit multiple CPs under one file name. As a condition of project closeout, Contractor shall provide a DVD of all certified payrolls submitted for the project. Refer to General Requirements.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

****END OF SECTION****

APPENDIX A
CWSRF BOILERPLATES
FEDERAL REQUIREMENTS

For
CONSULTANTS AND CONTRACTORS

June 2018

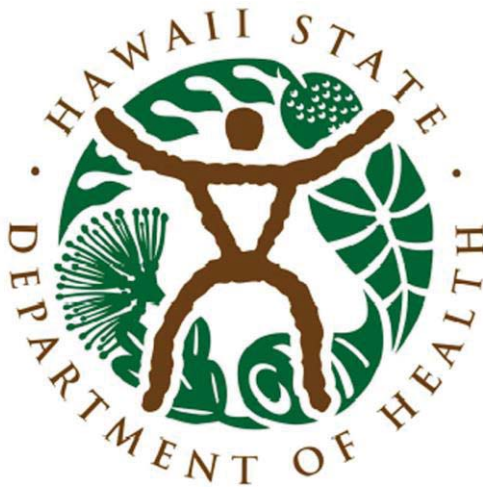
(28 pages excluding this sheet)

"CWSRF BOILERPLATE"

FEDERAL REQUIREMENTS

FOR

CONSULTANTS AND CONTRACTORS



June 2018

"CWSRF BOILERPLATE"

FEDERAL REQUIREMENTS

FOR

CONSULTANTS AND CONTRACTORS

To the Consultant, Contractor or Sub-contractor of a CWSRF loan funded project:

All CWSRF projects must comply with all the federal regulations listed herein which have been determined as applying to the SRF loan program.

A. CROSS-CUTTER REGULATIONS

1. ENVIRONMENTAL AUTHORITIES:

a. ARCHEOLOGICAL AND HISTORIC PRESERVATION ACT OF 1974,
16 USC 469a-1

Should the contractor discover potential archaeological or historical resources during construction, all work in the area of the find shall stop and the construction management consultant shall be called in to evaluate the situation and make recommendations to the State Historic Preservation Officer, Department of Land and Natural Resources, State of Hawaii. The Historic Preservation Officer will determine what will be necessary for construction to proceed.

2. SOCIAL POLICY AUTHORITIES:

a. AGE DISCRIMINATION ACT OF 1975, 42 USC 6102

No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

b. CIVIL RIGHTS ACT OF 1964, TITLE VI, 42 USC 2000d

No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

- c. EQUAL EMPLOYMENT OPPORTUNITY, EXECUTIVE ORDER 11246, AS AMENDED

The contractor, subcontractor, or consultant for any SRF project shall maintain a policy of non-discrimination in the treatment of employees, shall make this policy known to employees, and shall recruit, hire and train employees without regard to race, color, sex, religion and national origin.

- d. SECTION 13 OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 33 USC 1251

No person in the United States shall, on the grounds of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal assistance under... the federal Water Pollution Control Act...

- e. REHABILITATION ACT OF 1973, 29 USC 794

No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

- f. MINORITY BUSINESS ENTERPRISE DEVELOPMENT, EXECUTIVE ORDER 12432

This executive order sets forth in more detail the responsibilities of Federal agencies for the monitoring, maintaining of data and reporting on the use of minority enterprises.

- g. NATIONAL PROGRAM FOR MINORITY BUSINESS ENTERPRISE, EXECUTIVE ORDER 11625

This Executive Order directs Federal agencies to promote and encourage the use of minority business enterprises in projects utilizing federal funds.

- h. NATIONAL WOMEN'S BUSINESS ENTERPRISE POLICY AND NATIONAL PROGRAM FOR WOMEN'S BUSINESS ENTERPRISE, EXECUTIVE ORDER 12138

This Executive Order directs each department or agency empowered to extend Federal financial assistance to any program or activity to issue regulations requiring the recipient of such assistance to take appropriate affirmative action in support of women's business enterprises and to prohibit actions or policies which

discriminate against women's business enterprises on the grounds of sex.

- i. SMALL BUSINESS ADMINISTRATION REAUTHORIZATION AND AMENDMENT ACT OF 1998, PUB. L. 100-590, SECTION 129

This Amendment directs Federal agencies to promote and encourage the use of small business enterprises in projects utilizing federal funds.

- j. DEPARTMENT OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND AGENCIES APPROPRIATIONS ACT, 1993, PUB. L. 102-389

The Administrator of the Environmental Protection Agency shall, hereafter to the fullest extent possible, ensure that at least 8 per centum of Federal funding for prime and subcontracts awarded in support of authorized programs, including grants, loans and contracts for wastewater treatment and for leaking underground storage tanks, be made available to businesses or other organizations owned or controlled by socially and economically disadvantaged individuals (within the meaning of Section 8(a)(5) and (6) of the Small Business Act (15 U.S.C. 637(a)(5) and (6)), including historically black colleges and universities. For purposes of this section, economically and socially disadvantaged individuals shall be deemed to include women.

- k. DISADVANTAGED BUSINESS ENTERPRISE RULE, 2008, 40 CFR Part 33

Prior to the award of a consultant or construction contract, the Contractor or Consultant shall fully comply with 40 CFR Part 33, entitled "Participation by Disadvantaged Business Enterprises in Procurement under Environmental Protection Agency (EPA Financial Assistance Agreements)". The Consultant or Contractor shall notify the County prior to termination of a Disadvantaged Business Enterprise (DBE) subconsultant or subcontractor for convenience by the Contractor. In addition, the Consultant or Contractor shall employ the six good faith efforts listed in 40 CFR 33.301 when soliciting a replacement subconsultant or subcontractor.

The Consultant or Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Consultant or Contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the Consultant or Contractor to

carry out these requirements is a material breach of this contract, which may result in the termination of this contract or other legally available remedies.

1. DAVIS BACON ACT, TITLE 29, PART 5, CODE OF FEDERAL REGULATIONS

The consultant or construction contractor shall comply with the labor standards provided under this act, including but not limited to:

- (1) Payment of the prevailing wage rate;
- (2) Posting of prevailing wage rates and Davis-Bacon poster at the work site where it can be easily seen by the workers;
- (3) The following Wage Determination General Decision and Modification numbers apply to this contract:

Wage Determination General Decision No.: HI 20200001
(CWSRF Loan Recipient to fill in)

Modification No.: 0 dated 01/03/2020
(CWSRF Loan Recipient to fill in)

The consultant or construction contractor understands that labor standards interviews will be conducted during the course of construction in accordance with Standard Form 1445.

3. MISCELLANEOUS AUTHORITIES:

a. DEBARMENT AND SUSPENSION, EXECUTIVE ORDER 12549

Prior to the award of a construction or consultant contract, the Contractor or Consultant shall fully comply with Subpart C of 40 CFR Part 32, entitled "Responsibilities of Participants Regarding Transactions" and ensure that any lower tier covered transaction and subsequent lower tier transaction, includes a term or condition requiring compliance with Subpart C. The Contractor shall certify that his subcontractors and suppliers are not on the Excluded Parties List when the bid proposals are submitted. The Consultant shall certify that his sub-consultants are not on the Excluded Parties List. The Contractor or Consultant acknowledges that failing to disclose the information required under 40 CFR 32.335 may result in the delay or negation of payment, or pursuance of legal remedies, including suspension and debarment. The Contractor or Consultant may access the Excluded Parties List System at <http://epls.arnet.gov>.

B. AMERICAN IRON AND STEEL (AIS) SECTION 608 OF THE CLEAN WATER ACT (CWA):

Funds made available from a State water pollution control revolving fund established under this title may not be used for a project for the construction, alteration, maintenance, or repair of treatment works unless all of the iron and steel products used in the project are produced in the United States.

See attached *AIS Guidance*.

C. REQUIRED FEDERAL FORM AND INFORMATION:

1. The following EPA form shall be submitted by the Consultant or Contractor to the recipient (County) for each CWSRF project:

EPA Form 5700-52A (MBE/WBE Utilization Under Federal Grants, Cooperative Agreements, and Other Federal Financial Assistance)

2. The following information must be included in the contract specifications:

- a. Davis Bacon Requirements (see attached)

LABOR STANDARDS INTERVIEW

| | | | | | | |
|--------------------------|--|------------|----------------------|---------------------|------------|----------|
| CONTRACT NUMBER | | | EMPLOYEE INFORMATION | | | |
| NAME OF PRIME CONTRACTOR | | | LAST NAME | | FIRST NAME | MI |
| | | | STREET ADDRESS | | | |
| NAME OF EMPLOYER | | | CITY | | STATE | ZIP CODE |
| | | | SUPERVISOR'S NAME | | | |
| LAST NAME | | FIRST NAME | MI | WORK CLASSIFICATION | WAGE RATE | |

ACTION

CHECK BELOW

| YES | NO |
|-----|----|
|-----|----|

Do you work over 8 hours per day?

Do you work over 40 hours per week?

Are you paid at least time and a half for overtime hours?

Are you receiving any cash payments for fringe benefits required by the posted wage determination decision?

WHAT DEDUCTIONS OTHER THAN TAXES AND SOCIAL SECURITY ARE MADE FROM YOUR PAY?

HOW MANY HOURS DID YOU WORK ON YOUR LAST WORK DAY BEFORE THIS INTERVIEW?

TOOLS YOU USE

DATE OF LAST WORK DAY BEFORE INTERVIEW (YYMMDD)

DATE YOU BEGAN WORK ON THIS PROJECT (YYMMDD)

THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE

EMPLOYEE'S SIGNATURE

DATE (YYMMDD)

INTERVIEWER SIGNATURE

TYPED OR PRINTED NAME

DATE (YYMMDD)

INTERVIEWER'S COMMENTS

WORK EMPLOYEE WAS DOING WHEN INTERVIEWED

ACTION (If explanation is needed, use comments section)

| YES | NO |
|-----|----|
|-----|----|

IS EMPLOYEE PROPERLY CLASSIFIED AND PAID?

ARE WAGE RATES AND POSTERS DISPLAYED?

FOR USE BY PAYROLL CHECKER

IS ABOVE INFORMATION IN AGREEMENT WITH PAYROLL DATA?

☐ YES

☐ NO

COMMENTS

CHECKER

LAST NAME

FIRST NAME

MI

JOB TITLE

SIGNATURE

DATE (YYMMDD)

| 1A. FEDERAL FISCAL YEAR (Oct. 1-Sep 30) 20_____ | | 1B. REPORTING PERIOD (Check ALL appropriate boxes) <input type="checkbox"/> 1 st (Oct-Dec) <input type="checkbox"/> 2 nd (Jan-Mar) <input type="checkbox"/> 3 rd (Apr-Jun) <input type="checkbox"/> 4 th (Jul-Sep) <input type="checkbox"/> Semi-Annual (Oct-Mar) <input type="checkbox"/> Semi-Annual (Apr-Sep) <input type="checkbox"/> Annual <input type="checkbox"/> Check if this is the last report for the project (Project completed). | | | | | | | | | | | | | | | | | | | | |
|---|---------------------|---|-----------------|--|--------------|---------------------|------------------|-----------------|-----------------|--------------|---------------|-------|-------|-------|-------|-------|---------------|-------|-------|-------|-------|-------|
| 1C. REVISION OF A PRIOR REPORT? Y or N Year: _____ Quarter: _____ | | BRIEFLY DESCRIBE THE REVISIONS YOU ARE MAKING: | | | | | | | | | | | | | | | | | | | | |
| 2A. EPA FINANCIAL ASSISTANCE OFFICE ADDRESS (ATTN: DBE Coordinator) | | 3A. RECIPIENT NAME AND ADDRESS | | | | | | | | | | | | | | | | | | | | |
| 2B. EPA DBE COORDINATOR Name: E-mail: | | 2C. PHONE: Fax: | | 3B. RECIPIENT REPORTING CONTACT: Name: E-mail: | | | | | | | | | | | | | | | | | | |
| | | 3C. PHONE: Fax: | | | | | | | | | | | | | | | | | | | | |
| 4A. FINANCIAL ASSISTANCE AGREEMENT ID NUMBER (SRF State Recipients, refer to Instructions for Completion of blocks 4A, 5A and 5C.) | | 4B. FEDERAL FINANCIAL ASSISTANCE PROGRAM TITLE or CFDA NUMBER: | | | | | | | | | | | | | | | | | | | | |
| 5A. TOTAL ASSISTANCE AGREEMENT AMOUNT (SRF State Recipients, refer to Instructions for Completion of blocks 4A, 5A and 5C.) EPA Share: \$ _____ Recipient Share: \$ _____ | | 5B. If NO procurement and NO accomplishments were made this reporting period (by the recipients, sub-recipients, loan recipients, and prime contractors), CHECK and SKIP to Block No. 7. (<u>Procurements</u> are all expenditures through contract, order, purchase, lease or barter of supplies, equipment, construction, or services needed to complete Federal assistance programs. <u>Accomplishments</u> , in this context, are procurements made with MBEs and/or WBEs. <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | |
| 5C. Total Procurements This Reporting Period (Only include amount not reported in any prior reporting period) Total Procurement Amount \$ _____ (Include total dollar values awarded by recipient, sub-recipients and SRF loan recipients, including MBE/WBE expenditures.) | | | | | | | | | | | | | | | | | | | | | | |
| 5D. Were sub-awards issued under this assistance agreement? Yes____ No____ Were contracts issued under this assistance agreement ? Yes____ No____ | | | | | | | | | | | | | | | | | | | | | | |
| 5E. MBE/WBE Accomplishments This Reporting Period Actual MBE/WBE Procurement Accomplished: (Include total dollar values awarded by recipient, sub-recipients, SRF loan recipients and Prime Contractors.) <table><thead><tr><th></th><th><u>Construction</u></th><th><u>Equipment</u></th><th><u>Services</u></th><th><u>Supplies</u></th><th><u>Total</u></th></tr></thead><tbody><tr><td>\$MBE:</td><td>_____</td><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr><tr><td>\$WBE:</td><td>_____</td><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr></tbody></table> | | | | | | <u>Construction</u> | <u>Equipment</u> | <u>Services</u> | <u>Supplies</u> | <u>Total</u> | \$MBE: | _____ | _____ | _____ | _____ | _____ | \$WBE: | _____ | _____ | _____ | _____ | _____ |
| | <u>Construction</u> | <u>Equipment</u> | <u>Services</u> | <u>Supplies</u> | <u>Total</u> | | | | | | | | | | | | | | | | | |
| \$MBE: | _____ | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| \$WBE: | _____ | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 6. COMMENTS: (If no MBE/WBE procurements were accomplished during the reporting period, please explain what steps you are taking to achieve the MBE/WBE Program requirements specified in the terms and conditions of the Assistance Agreement.) | | | | | | | | | | | | | | | | | | | | | | |
| 7. NAME OF RECIPIENT'S AUTHORIZED REPRESENTATIVE | | TITLE | | | | | | | | | | | | | | | | | | | | |
| 8. SIGNATURE OF RECIPIENT'S AUTHORIZED REPRESENTATIVE | | DATE | | | | | | | | | | | | | | | | | | | | |

MBE/WBE PROCUREMENTS MADE DURING REPORTING PERIOD
EPA Financial Assistance Agreement Number: _____

Type of product or service codes:

4 = Equipment

EPA FORM 5700-52A - (Approval Expires 06/30/14)

Instructions:

A. General Instructions:

MBE/WBE utilization is based on 40 CFR Part 33. EPA Form 5700-52A must be completed by recipients of Federal grants, cooperative agreements, or other Federal financial assistance which involve procurement of supplies, equipment, construction or services to accomplish Federal assistance programs.

Recipients are required to report 30 days after the end of each federal fiscal quarter, semiannually, or annually, per the terms and conditions of the financial assistance agreement.

| | Quarterly Reporting Due Date | Semiannual Reporting Due Date | Annual Reporting Due Date |
|---|---|-------------------------------|---------------------------|
| Agreements awarded prior to May 27, 2008 | January 30, April 30, July 30, October 30 | N/A | October 30 |
| Agreements awarded on or after May 27, 2008 | N/A | April 30, October 30 | October 30 |

MBE/WBE program requirements, including reporting, are material terms and conditions of the financial assistance agreement.

B. Definitions:

Procurement is the acquisition through contract, order, purchase, lease or barter of supplies, equipment, construction or services needed to accomplish Federal assistance programs.

A **contract** is a written agreement between an EPA recipient and another party (also considered "prime contracts") and any lower tier agreement (also considered "subcontracts") for equipment, services, supplies, or construction necessary to complete the project. This definition excludes written agreements with another public agency. This definition includes personal and professional services, agreements with consultants, and purchase orders.

A **minority business enterprise (MBE)** is a business concern that is (1) at least 51 percent owned by one or more minority individuals, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more of the minority owners. In order to qualify and participate as an MBE prime or subcontractor for EPA

recipients under EPA's DBE Program, an entity must be properly certified as required by 40 CFR Part 33, Subpart B.

U.S. citizenship is required. Recipients shall presume that minority individuals include Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, or other groups whose members are found to be disadvantaged by the Small Business Act or by the Secretary of Commerce under section 5 of Executive order 11625. The reporting contact at EPA can provide additional information.

A **woman business enterprise (WBE)** is a business concern that is, (1) at least 51 percent owned by one or more women, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more women and (2) whose daily business operations are managed and directed by one or more of the women owners. In order to qualify and participate as a WBE prime or subcontractor for EPA recipients under EPA's DBE Program, an entity must be properly certified as required by 40 CFR Part 33, Subpart B.

Business firms which are 51 percent owned by minorities or women, but are in fact managed and operated by non-minority individuals do not qualify for meeting MBE/WBE procurement goals. U.S. Citizenship is required.

Good Faith Efforts

A recipient is required to make the following good faith efforts whenever procuring construction, equipment, services, and supplies under an EPA financial assistance agreement. These good faith efforts for utilizing MBEs and WBEs must be documented. Such documentation is subject to EPA review upon request:

1. Include of MBEs/WBEs on solicitation lists.
2. Assure that MBEs/WBEs are solicited once they are identified.
3. Divide total requirements into smaller tasks to permit maximum MBE/WBE participation, where feasible.
4. Establish delivery schedules which will encourage MBE/WBE participation, where feasible.
5. Encourage use of the services of the U.S. Department of Commerce's Minority Business Development Agency (MBDA) and the U.S. Small Business Administration to identify MBEs/WBEs.

6. Require that each party to a subgrant, subagreement, or contract award take the good faith efforts outlined here.

C. Instructions for Part I:

- 1a. Specify Federal fiscal year this report covers. The Federal fiscal year runs from October 1st through September 30th (**e.g. November 29, 2010 falls within Federal fiscal year 2011**)
- 1b. Check applicable reporting box, quarterly, semiannually, or annually. Also indicate if this is the last report for the project.
- 1c. Indicate if this is a revision to a previous year, half-year, or quarter, and provide a brief description of the revision you are making.
- 2a-c. Please refer to your financial assistance agreement for the mailing address of the EPA financial assistance office for your agreement.
- The "EPA DBE Reporting Contact" is the DBE Coordinator for the EPA Region from which your financial assistance agreement was originated. For a list of DBE Coordinators please refer to the EPA OSBP website at www.epa.gov/osbp. Click on "Regional Contacts" for the name of your coordinator.
- 3a-c. Identify the agency, state authority, university or other organization which is the recipient of the Federal financial assistance and the person to contact concerning this report.
- 4a. Provide the Assistance Agreement number assigned by EPA. A separate report must be submitted for each Assistance Agreement.
- *For SRF recipients:** In box 4a list numbers for ALL OPEN Assistance Agreements being reported on this form. Please note that although the New DBE Rule (which took effect May 27, 2008) revised the reporting frequency requirements from quarterly to semiannually, that change only applies to agreements awarded AFTER the New DBE Rule took effect. Therefore, SRF recipients may either continue to report activity for all Agreements on one form on a quarterly basis until the last award that was made prior to the New DBE Rule has been closed out; OR, the recipient may split the submission of SRF reports into quarterly reports for Agreements awarded prior the New DBE Rule, and semiannually for the awards made after the New DBE Rule.

- 4b. Refer back to Assistance Agreement document for this information.

- 5a. Provide the total amount of the Assistance Agreement which includes Federal funds plus recipient matching funds and funds from other sources.

***For SRF recipients only:** SRF recipients will not enter an amount in 5a. Please leave 5a blank.

- 5b. Self-explanatory.

- 5c. Provide the total dollar amount of **ALL** procurements awarded this reporting period by the recipient, sub-recipients, and SRF loan recipients, **including** MBE/WBE expenditures. For example: Actual dollars for procurement from the procuring office; actual contracts let from the contracts office; actual goods, services, supplies, etc., from other sources including the central purchasing/ procurement centers).

***NOTE:** To prevent double counting on line 5C, if any amount on 5E is for a subcontract and the prime contract has already been included on Line 5C in a prior reporting period, then report the amount going to MBE or WBE subcontractor on line 5E, but exclude the amount from Line 5C. To include the amount on 5C again would result in double counting because the prime contract, which includes the subcontract, would have already been reported.

- 5d. State whether or not sub-awards and/or subcontracts have been issued under the assistance agreement by indicating "yes" or "no".

- 5e. Where requested, also provide the total dollar amount of all MBE/WBE procurement awarded during this reporting period by the recipient, sub-recipients, SRF loan recipients, and prime contractors in the categories of construction, equipment, services and supplies. These amounts include Federal funds plus recipient matching funds and funds from other sources.

***For SRF recipients only:** In 5c please enter the total procurement amount for the quarter, or semiannual period, under all of your SRF Assistance Agreements. The figure reported in this section is **not** directly tied to an individual Assistance Agreement identification number. **(SRF state recipients report state procurements in this section)**

6. If there were no MBE/WBE accomplishments this reporting period, please briefly explain what

specific steps you are taking to achieve the MBE/WBE requirements specified in the terms and conditions of the Assistance Agreement.

7. Name and title of official administrator or designated reporting official.
8. Signature, month, day, and year report submitted.

D. Instructions for Part II:

For each MBE/WBE procurement made under this assistance agreement during the reporting period, provide the following information:

1. Check whether this procurement was made by the recipient, sub-recipient/SRF loan recipient, or the prime contractor.
2. Check either the MBE or WBE column. If a firm is both an MBE and WBE, the recipient may choose to count the entire procurement towards EITHER its MBE or WBE accomplishments. The recipient may also divide the total amount of the procurement (using any ratio it so chooses) and count those divided amounts toward its MBE and WBE accomplishments. If the recipient chooses to divide the procurement amount and count portions toward its MBE and WBE accomplishments, please state the appropriate amounts under the MBE and WBE columns on the form. **The combined MBE and WBE amounts for that MBE/WBE contractor must not exceed the "Value of the Procurement" reported in column #3**
3. Dollar value of procurement.
4. Date of procurement, shown as month, day, year. Date of procurement is defined as the date the contract or procurement was awarded, **not** the date the contractor received payment under the awarded contract or procurement, unless payment occurred on the date of award. **(Where direct purchasing is the procurement method, the date of procurement is the date the purchase was made)**
5. Using codes at the bottom of the form, identify type of product or service acquired through this procurement (e.g., enter 1 if construction, 2 if supplies, etc).
6. Name, address, and telephone number of MBE/WBE firm.

**This data is requested to comply with provisions mandated by: statute or regulations (40 CFR Part 30, 31,

and 33); OMB Circulars; or added by EPA to ensure sound and effective assistance management. Accurate, complete data are required to obtain funding, while no pledge of confidentiality is provided.

The public reporting and recording burden for this collection of information is estimated to average 1 hour per response annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclosure or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2136), 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB Control number in any correspondence. Do not send the completed form to this address.

AMERICAN IRON AND STEEL (AIS) GUIDANCE

Covered Iron and Steel Products

What is an iron or steel product?

For purposes of the CWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

Lined or unlined pipes or fittings;
Manhole Covers;
Municipal Castings (defined in more detail below);
Hydrants;
Tanks;
Flanges;
Pipe clamps and restraints;
Valves;
Structural steel (defined in more detail below);
Reinforced precast concrete; and
Construction materials (defined in more detail below).

What does the term 'primarily iron or steel' mean?

'Primarily iron or steel' places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

Can you provide an example of how to perform a cost determination?

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

What is the definition of steel?

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

What does ‘produced in the United States’ mean?

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the 7 material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

Are the raw materials used in the production of iron or steel required to come from US sources?

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

What is the definition of ‘municipal castings’?

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel.

Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers; 8
- Meter Boxes;
- Service Boxes;
- Steel Hinged Hatches, Square and Rectangular;
- Steel Riser Rings;
- Trash receptacles;
- Tree Grates;
- Tree Guards;
- Trench Grates; and
- Valve Boxes, Covers and Risers.

What is 'structural steel'?

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

What is a 'construction material' for purposes of the AIS requirement?

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered "structural steel". This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

What is not considered a 'construction material' for purposes of the AIS requirement?

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

Construction Contract Language for AIS

Projects funded with monies from the Clean Water State Revolving Fund are subject to the American Iron and Steel (AIS) requirement as in Section 608 of the Clean Water Act. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that a) the Contractor has reviewed and understands the AIS requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the AIS requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with the AIS requirement, or information necessary to support a waiver of the AIS requirement, as may be requested by the Purchaser or the State. Failure to comply with the AIS requirement by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser).

Sample Certifications

The following information is provided as a sample letter of step certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxx
2. Xxx
3. Xxx

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXX X)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxxx
2. Xxxx
3. Xxxx

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

DAVIS BACON REQUIREMENTS

1. **Contract and Subcontract provisions.**

- (a) The Recipient shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF the following clauses:

(1) Minimum wages.

- (i) All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

The Recipient may obtain wage determinations from the U.S. Department of Labor's web site, www.dol.gov.

- (ii)(A) The Recipient, on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

DAVIS BACON REQUIREMENTS

- (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Recipient agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the Recipient to the State award official. The State award official will transmit the report, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the and the Recipient do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request, and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

DAVIS BACON REQUIREMENTS

- (2) Withholding. The Recipient shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- (3) Payrolls and basic records.
 - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
 - (ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the Recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State or EPA. As to each payroll copy received, the Recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number).

DAVIS BACON REQUIREMENTS

The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Recipient for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the Recipient.

- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the

DAVIS BACON REQUIREMENTS

required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees.

- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they

DAVIS BACON REQUIREMENTS

are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards

DAVIS BACON REQUIREMENTS

provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the Recipient, State, EPA, the U.S. Department of Labor, or the employees or their representatives.

- (10) Certification of eligibility.
 - (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

2. **Contract Provision for Contracts in Excess of \$100,000.**

- (a) Contract Work Hours and Safety Standards Act. The Recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Section 1, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.
 - (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
 - (3) Withholding for unpaid wages and liquidated damages. The Recipient shall upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld, from any moneys payable on account of work

DAVIS BACON REQUIREMENTS

performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (b) In addition to the clauses contained in Section 1, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

3. Compliance Verification

- (a) The Recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The Recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.
- (b) The Recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, the Recipient should conduct interviews with a representative group of covered employees within two weeks of each contractor or subcontractor's submission of its initial weekly payroll data and two weeks prior to the estimated completion date for the contract or subcontract. The Recipient must conduct more frequent interviews if the initial interviews or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. The Recipient shall immediately conduct necessary interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.
- (c) The Recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The Recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the Recipient shall spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and

DAVIS BACON REQUIREMENTS

two weeks prior to the completion date the contract or subcontract. The Recipient must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the Recipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

- (d) The Recipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) The Recipient must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/esa/contacts/whd/america2.htm>.

APPENDIX B

Wage Determination General Decision No.: HI20200001

Modification No. 0 dated 01/03/2020
(33 pages excluding this sheet)

"General Decision Number: HI20200001 01/03/2020

Superseded General Decision Number: HI20190001

State: Hawaii

Construction Types: Building, Heavy (Heavy and Dredging),
Highway and Residential

Counties: Hawaii Statewide.

BUILDING CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION
PROJECTS (consisting of single family homes and apartments up
to and including 4 stories); HEAVY AND HIGHWAY CONSTRUCTION
PROJECTS AND DREDGING

Note: Under Executive Order (EO) 13658, an hourly minimum wage
of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the
contract is awarded

(and any solicitation was issued) on or after January 1, 2015.

If this contract is covered by the EO, the contractor must pay
all workers in any classification listed on this wage

determination at least \$10.80 per hour (or the applicable
wage rate listed on this wage determination, if it is higher)

for all hours spent performing on the contract in calendar
year 2020. If this contract is covered by the EO and a

classification considered necessary for performance of work on
the contract does not appear on this wage determination, the
contractor must pay workers in that classification at least

the wage rate determined through the conformance process set
forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate,
if it is higher than the conformed wage rate). The EO minimum

wage rate will be adjusted annually. Please note that

this EO applies to the above-mentioned types of contracts
entered into by the federal government that are subject

to the Davis-Bacon Act itself, but it does not apply

to contracts subject only to the Davis-Bacon Related Acts,

including those set forth at 29 CFR 5.1(a)(2)-(60). Additional

information on contractor requirements and worker protections
under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/03/2020

ASBE0132-001 08/31/2015

Rates Fringes

Asbestos Workers/Insulator

Includes application of

all insulating materials,

protective coverings,

coatings and finishes to

all types of mechanical

systems. Also the

application of

| | | |
|--|----------|-------|
| firestopping material for wall openings and penetrations in walls, floors, ceilings and curtain walls..... | \$ 39.65 | 23.50 |
|--|----------|-------|

BOIL0627-005 01/01/2013

| | | |
|------------------|----------|---------|
| | Rates | Fringes |
| BOILERMAKER..... | \$ 35.20 | 27.35 |

BRHI0001-001 01/01/2019

| | | |
|--|----------|---------|
| | Rates | Fringes |
| BRICKLAYER | | |
| Bricklayers and Stonemasons..... | \$ 43.66 | 24.32 |
| Pointers, Caulkers and Weatherproofers..... | \$ 43.60 | 24.32 |

BRHI0001-002 09/04/2018

| | | |
|---|----------|---------|
| | Rates | Fringes |
| Tile, Marble & Terrazzo Worker | | |
| Terrazzo Base Grinders..... | \$ 39.89 | 28.11 |
| Terrazzo Floor Grinders and Tenders..... | \$ 38.34 | 28.11 |
| Tile, Marble and Terrazzo Workers..... | \$ 41.70 | 28.11 |

* CARP0745-001 09/02/2019

| | | |
|--|----------|---------|
| | Rates | Fringes |
| Carpenters: | | |
| Carpenters; Hardwood Floor Layers; Patent Scaffold Erectors (14 ft. and over); Piledrivers; Pneumatic Nailers; Wood Shinglers and Transit and/or Layout Man..... | \$ 49.95 | 22.40 |
| Millwrights and Machine Erectors..... | \$ 50.20 | 22.40 |
| Power Saw Operators (2 h.p. and over)..... | \$ 50.10 | 22.40 |

* CARP0745-002 09/02/2019

| | | |
|--|----------|---------|
| | Rates | Fringes |
| Drywall and Acoustical Workers and Lathers..... | \$ 50.20 | 22.40 |

ELEC1186-001 08/26/2019

| | Rates | Fringes |
|------------------------------|----------|-------------|
| Electricians: | | |
| Cable Splicers..... | \$ 55.88 | 16.13+24.1% |
| Electricians..... | \$ 50.80 | 15.97+24.1% |
| Telecommunication worker.... | \$ 30.94 | 12.30 |

ELEC1186-002 08/26/2019

| | Rates | Fringes |
|------------------------------|----------|-------------|
| Line Construction: | | |
| Cable Splicers..... | \$ 55.88 | 22.88 |
| Groundmen/Truck Drivers..... | \$ 38.10 | 15.59+24.1% |
| Heavy Equipment Operators... | \$ 45.72 | 21.19 |
| Linemen..... | \$ 50.80 | 22.03 |
| Telecommunication worker.... | \$ 31.69 | 12.49 |

ELEV0126-001 01/01/2019

| | Rates | Fringes |
|------------------------|----------|---------|
| ELEVATOR MECHANIC..... | \$ 59.20 | 33.705 |

a. VACATION: Employer contributes 8% of basic hourly rate for 5 years service and 6% of basic hourly rate for 6 months to 5 years service as vacation pay credit.

b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

ENGI0003-002 09/03/2018

| | Rates | Fringes |
|---|----------|---------|
| Diver (Aqua Lung) (Scuba) | | |
| Diver (Aqua Lung) (Scuba) | | |
| (over a depth of 30 feet)... | \$ 66.00 | 31.26 |
| Diver (Aqua Lung) (Scuba) | | |
| (up to a depth of 30 feet).. | \$ 56.63 | 31.26 |
| Stand-by Diver (Aqua Lung) | | |
| (Scuba)..... | \$ 47.25 | 31.26 |
| Diver (Other than Aqua Lung) | | |
| Diver (Other than Aqua Lung)..... | \$ 66.00 | 31.26 |
| Diver Tender (Other than Aqua Lung)..... | \$ 44.22 | 31.26 |
| Stand-by Diver (Other than Aqua Lung)..... | \$ 47.25 | 31.26 |
| Helicopter Work | | |
| Airborne Hoist Operator for Helicopter..... | \$ 45.80 | 31.26 |
| Co-Pilot of Helicopter..... | \$ 45.98 | 31.26 |

| | | |
|---|----------|-------|
| Pilot of Helicopter..... | \$ 46.11 | 31.26 |
| Power equipment operator - tunnel work | | |
| GROUP 1..... | \$ 42.24 | 31.26 |
| GROUP 2..... | \$ 42.35 | 31.26 |
| GROUP 3..... | \$ 42.52 | 31.26 |
| GROUP 4..... | \$ 42.79 | 31.26 |
| GROUP 5..... | \$ 43.10 | 31.26 |
| GROUP 6..... | \$ 43.75 | 31.26 |
| GROUP 7..... | \$ 44.07 | 31.26 |
| GROUP 8..... | \$ 44.18 | 31.26 |
| GROUP 9..... | \$ 44.29 | 31.26 |
| GROUP 9A..... | \$ 44.52 | 31.26 |
| GROUP 10..... | \$ 44.58 | 31.26 |
| GROUP 10A..... | \$ 44.73 | 31.26 |
| GROUP 11..... | \$ 44.88 | 31.26 |
| GROUP 12..... | \$ 45.24 | 31.26 |
| GROUP 12A..... | \$ 45.60 | 31.26 |
| Power equipment operators: | | |
| GROUP 1..... | \$ 41.94 | 31.26 |
| GROUP 2..... | \$ 42.05 | 31.26 |
| GROUP 3..... | \$ 42.22 | 31.26 |
| GROUP 4..... | \$ 42.49 | 31.26 |
| GROUP 5..... | \$ 42.80 | 31.26 |
| GROUP 6..... | \$ 43.45 | 31.26 |
| GROUP 7..... | \$ 43.77 | 31.26 |
| GROUP 8..... | \$ 43.88 | 31.26 |
| GROUP 9..... | \$ 43.99 | 31.26 |
| GROUP 9A..... | \$ 44.22 | 31.26 |
| GROUP 10..... | \$ 44.28 | 31.26 |
| GROUP 10A..... | \$ 44.43 | 31.26 |
| GROUP 11..... | \$ 44.58 | 31.26 |
| GROUP 12..... | \$ 44.94 | 31.26 |
| GROUP 12A..... | \$ 45.30 | 31.26 |
| GROUP 13..... | \$ 42.22 | 31.26 |
| GROUP 13A..... | \$ 42.49 | 31.26 |
| GROUP 13B..... | \$ 42.80 | 31.26 |
| GROUP 13C..... | \$ 43.45 | 31.26 |
| GROUP 13D..... | \$ 43.77 | 31.26 |
| GROUP 13E..... | \$ 43.88 | 31.26 |

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Fork Lift (up to and including 10 tons); Partsman (heavy duty repair shop parts room when needed).

GROUP 2: Conveyor Operator (Handling building material); Hydraulic Monitor; Mixer Box Operator (Concrete Plant).

GROUP 3: Brakeman; Deckhand; Fireman; Oiler; Oiler/Gradechecker; Signalman; Switchman; Highline Cableway

Signalman; Bargeman; Bunkerman; Concrete Curing Machine (self-propelled, automatically applied unit on streets, highways, airports and canals); Leveeman; Roller (5 tons and under); Tugger Hoist.

GROUP 4: Boom Truck or dual purpose "A" Frame Truck (5 tons or less); Concrete Placing Boom (Building Construction); Dinky Operator; Elevator Operator; Hoist and/or Winch (one drum); Straddle Truck (Ross Carrier, Hyster and similar).

GROUP 5: Asphalt Plant Fireman; Compressors, Pumps, Generators and Welding Machines ("Bank" of 9 or more, individually or collectively); Concrete Pumps or Pumpcrete Guns; Lubrication and Service Engineer (Grease Rack); Screedman.

GROUP 6: Boom Truck or Dual Purpose "A" Frame Truck (over 5 tons); Combination Loader/Backhoe (up to and including 3/4 cu. yd.); Concrete Batch Plants (wet or dry); Concrete Cutter, Groover and/or Grinder (self-propelled unit on streets, highways, airports, and canals); Conveyor or Concrete Pump (Truck or Equipment Mounted); Drilling Machinery (not to apply to waterliners, wagon drills or jack hammers); Fork Lift (over 10 tons); Loader (up to and including 3 and 1/2 cu. yds); Lull High Lift (under 40 feet); Lubrication and Service Engineer (Mobile); Maginnis Internal Full Slab Vibrator (on airports, highways, canals and warehouses); Man or Material Hoist; Mechanical Concrete Finisher (Large Clary, Johnson Bidwell, Bridge Deck and similar); Mobile Truck Crane Driver; Portable Shotblast Concrete Cleaning Machine; Portable Boring Machine (under streets, highways, etc.); Portable Crusher; Power Jumbo Operator (setting slip forms, etc., in tunnels); Rollers (over 5 tons); Self-propelled Compactor (single engine); Self-propelled Pavement Breaker; Skidsteer Loader with attachments; Slip Form Pumps (Power driven by hydraulic, electric, air, gas, etc., lifting device for concrete forms); Small Rubber Tired Tractors; Trencher (up to and including 6 feet); Underbridge Personnel Aerial Platform (50 feet of platform or less).

GROUP 7: Crusher Plant Engineer, Dozer (D-4, Case 450, John Deere 450, and similar); Dual Drum Mixer, Extend Lift; Hoist and/or Winch (2 drums); Loader (over 3 and 1/2 cu. yds. up to and including 6 yards.); Mechanical Finisher or Spreader Machine (asphalt), (Barber Greene and similar) (Screedman required); Mine or Shaft Hoist; Mobile Concrete Mixer (over 5 tons); Pipe Bending Machine (pipelines only); Pipe Cleaning Machine (tractor propelled and supported); Pipe Wrapping Machine (tractor propelled and supported); Roller Operator (Asphalt); Self-Propelled Elevating Grade Plane; Slusher Operator; Tractor (with boom) (D-6, or

similar); Trencher (over 6 feet and less than 200 h.p.); Water Tanker (pulled by Euclids, T-Pulls, DW-10, 20 or 21, or similar); Winchman (Stern Winch on Dredge).

GROUP 8: Asphalt Plant Operator; Barge Mate (Seagoing); Cast-in-Place Pipe Laying Machine; Concrete Batch Plant (multiple units); Conveyor Operator (tunnel); Deckmate; Dozer (D-6 and similar); Finishing Machine Operator (airports and highways); Gradesetter; Kolman Loader (and similar); Mucking Machine (Crawler-type); Mucking Machine (Conveyor-type); No-Joint Pipe Laying Machine; Portable Crushing and Screening Plant; Power Blade Operator (under 12); Saurman Type Dragline (up to and including 5 yds.); Stationary Pipe Wrapping, Cleaning and Bending Machine; Surface Heater and Planer Operator, Tractor (D-6 and similar); Tri-Batch Paver; Tunnel Badger; Tunnel Mole and/or Boring Machine Operator Underbridge Personnel Aerial Platform (over 50 feet of platform).

GROUP 9: Combination Mixer and Compressor (gunite); Do-Mor Loader and Adams Elegrader; Dozer (D-7 or equal); Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 h.p.).

GROUP 9A: Dozer (D-8 and similar); Gradesetter (when required by the Contractor to work from drawings, plans or specifications without the direct supervision of a foreman or superintendent); Push Cat; Scrapers (up to and including 20 cu. yds); Self-propelled Compactor with Dozer; Self-Propelled, Rubber-Tired Earthmoving Equipment (up to and including 20 cu. yds) (621 Band and similar); Sheep's Foot; Tractor (D-8 and similar); Tractors with boom (larger than D-6, and similar).

GROUP 10: Chicago Boom; Cold Planers; Heavy Duty Repairman or Welder; Hoist and/or Winch (3 drums); Hydraulic Skooper (Koehring and similar); Loader (over 6 cu. yds. up to and including 12 cu. yds.); Saurman type Dragline (over 5 cu. yds.); Self-propelled, rubber-tired Earthmoving Equipment (over 20 cu. yds. up to and including 31 cu. yds.) (637D and similar); Soil Stabilizer (P & H or equal); Sub-Grader (Gurries or other automatic type); Tractors (D-9 or equivalent, all attachments); Tractor (Tandem Scraper); Watch Engineer.

GROUP 10A: Boat Operator; Cable-operated Crawler Crane (up to and including 25 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (up to and including 1 cu. yd.); Dozer D9-L; Dozer (D-10, HD41 and similar) (all attachments); Gradall (up to and including 1 cu. yd.); Hydraulic Backhoe (over 3/4 cu. yds. up to and including 2 cu. yds.); Mobile Truck Crane Operator (up to and including 25 tons) (Mobile Truck Crane Driver Required);

Self-propelled Boom Type Lifting Device (Center Mount) (up to and including 25 tons) (Grove, Drott, P&H, Pettibone and similar; Trencher (over 6 feet and 750 h.p. or more); Watch Engineer (steam or electric).

GROUP 11: Automatic Slip Form Paver (concrete or asphalt); Band Wagon (in conjunction with Wheel Excavator); Cable-operated Crawler Cranes (over 25 tons but less than 50 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (over 1 cu. yd. up to 7 cu. yds.); Gradall (over 1 cu. yds. up to 7 cu. yds.); DW-10, 20, etc. (Tandem); Earthmoving Machines (multiple propulsion power units and 2 or more Scrapers) (up to and including 35 cu. yds., ""struck"" m.r.c.); Highline Cableway; Hydraulic Backhoe (over 2 cu. yds. up to and including 4 cu. yds.); Leverman; Lift Slab Machine; Loader (over 12 cu. yds); Master Boat Operator; Mobile Truck Crane Operator (over 25 tons but less than 50 tons); (Mobile Truck Crane Driver required); Pre-stress Wire Wrapping Machine; Self-propelled Boom-type Lifting Device (Center Mount) (over 25 tons m.r.c); Self-propelled Compactor (with multiple-propulsion power units); Single Engine Rubber Tired Earthmoving Machine (with Tandem Scraper); Tandem Cats; Trencher (pulling attached shield).

GROUP 12: Clamshell or Dipper Operator; Derricks; Drill Rigs; Multi-Propulsion Earthmoving Machines (2 or more Scrapers) (over 35 cu. yds ""struck""m.r.c.); Operators (Derricks, Piledrivers and Cranes); Power Shovels and Draglines (7 cu. yds. m.r.c. and over); Self-propelled rubber-tired Earthmoving equipment (over 31 cu. yds.) (657B and similar); Wheel Excavator (up to and including 750 cu. yds. per hour); Wheel Excavator (over 750 cu. yds. per hour).

GROUP 12A: Dozer (D-11 or similar or larger); Hydraulic Excavators (over 4 cu. yds.); Lifting cranes (50 tons and over); Pioneering Dozer/Backhoe (initial clearing and excavation for the purpose of providing access for other equipment where the terrain worked involves 1-to-1 slopes that are 50 feet in height or depth, the scope of this work does not include normal clearing and grubbing on usual hilly terrain nor the excavation work once the access is provided); Power Blade Operator (Cat 12 or equivalent or over); Straddle Lifts (over 50 tons); Tower Crane, Mobile; Traveling Truss Cranes; Universal, Liebherr, Linden, and similar types of Tower Cranes (in the erection, dismantling, and moving of equipment there shall be an additional Operating Engineer or Heavy Duty Repairman); Yo-Yo Cat or Dozer.

GROUP 13: Truck Driver (Utility, Flatbed, etc.)

GROUP 13A: Dump Truck, 8 cu.yds. and under (water level);

Water Truck (up to and including 2,000 gallons).

GROUP 13B: Water Truck (over 2,000 gallons); Tandem Dump Truck, over 8 cu. yds. (water level).

GROUP 13C: Truck Driver (Semi-trailer. Rock Cans, Semi-Dump or Roll-Offs).

GROUP 13D: Truck Driver (Slip-In or Pup).

GROUP 13E: End Dumps, Unlicensed (Euclid, Mack, Caterpillar or similar); Tractor Trailer (Hauling Equipment); Tandem Trucks hooked up to Trailer (Hauling Equipment)

BOOMS AND/OR LEADS (HOURLY PREMIUMS):

The Operator of a crane (under 50 tons) with a boom of 80 feet or more (including jib), or of a crane (under 50 tons) with leads of 100 feet or more, shall receive a per hour premium for each hour worked on said crane (under 50 tons) in accordance with the following schedule:

Booms of 80 feet up to but

not including 130 feet or

Leads of 100 feet up to but
not including 130 feet 0.50

Booms and/or Leads of 130 feet

up to but not including 180 feet 0.75

Booms and/or Leads of 180 feet up

to and including 250 feet 1.15

Booms and/or Leads over 250 feet 1.50

The Operator of a crane (50 tons and over) with a boom of 180 feet or more (including jib) shall receive a per hour premium for each hour worked on said crane (50 tons and over) in accordance with the following schedule:

Booms of 180 feet up to

and including 250 feet 1.25

Booms over 250 feet 1.75

ENGI0003-004 09/04/2017

Rates Fringes

Dredging: (Boat Operators)

Boat Deckhand.....\$ 41.22 30.93

Boat Operator.....\$ 43.43 30.93

Master Boat Operator.....\$ 43.58 30.93

Dredging: (Clamshell or

Dipper Dredging)

GROUP 1.....\$ 43.94 30.93

GROUP 2.....\$ 43.28 30.93

GROUP 3.....\$ 42.88 30.93

GROUP 4.....\$ 41.22 30.93

Dredging: (Derricks)

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 43.94 | 30.93 |
| GROUP 2..... | \$ 43.28 | 30.93 |
| GROUP 3..... | \$ 42.88 | 30.93 |
| GROUP 4..... | \$ 41.22 | 30.93 |

Dredging: (Hydraulic Suction

Dredges)

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 43.58 | 30.93 |
| GROUP 2..... | \$ 43.43 | 30.93 |
| GROUP 3..... | \$ 43.28 | 30.93 |
| GROUP 4..... | \$ 43.22 | 30.93 |
| GROUP 5..... | \$ 37.88 | 26.76 |
| Group 5..... | \$ 42.88 | 30.93 |
| GROUP 6..... | \$ 37.77 | 26.76 |
| Group 6..... | \$ 42.77 | 30.93 |
| GROUP 7..... | \$ 36.22 | 26.76 |
| Group 7..... | \$ 41.22 | 30.93 |

CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS

GROUP 1: Clamshell or Dipper Operator.

GROUP 2: Mechanic or Welder; Watch Engineer.

GROUP 3: Barge Mate; Deckmate.

GROUP 4: Bargeman; Deckhand; Fireman; Oiler.

HYDRAULIC SUCTION DREDGING CLASSIFICATIONS

GROUP 1: Leverman.

GROUP 2: Watch Engineer (steam or electric).

GROUP 3: Mechanic or Welder.

GROUP 4: Dozer Operator.

GROUP 5: Deckmate.

GROUP 6: Winchman (Stern Winch on Dredge)

GROUP 7: Deckhand (can operate anchor scow under direction of Deckmate); Fireman; Leveeman; Oiler.

DERRICK CLASSIFICATIONS

GROUP 1: Operators (Derricks, Piledrivers and Cranes).

GROUP 2: Saurman Type Dragline (over 5 cubic yards).

GROUP 3: Deckmate; Saurman Type Dragline (up to and including 5 yards).

GROUP 4: Deckhand, Fireman, Oiler.

ENGI0003-044 09/03/2018

Rates Fringes

Power Equipment Operators

(PAVING)

Asphalt Concrete Material

Transfer.....\$ 42.92 32.08

Asphalt Plant Operator.....\$ 43.35 32.08

Asphalt Raker.....\$ 41.96 32.08

Asphalt Spreader Operator...\$ 43.44 32.08

Cold Planer.....\$ 43.75 32.08

Combination Loader/Backhoe

| | |
|--|-------|
| (over 3/4 cu.yd.).....\$ 41.96 | 32.08 |
| Combination Loader/Backhoe (up to 3/4 cu.yd.).....\$ 40.98 | 32.08 |
| Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals).....\$ 42.92 | 32.08 |
| Grader.....\$ 43.75 | 32.08 |
| Laborer, Hand Roller.....\$ 41.46 | 32.08 |
| Loader (2 1/2 cu. yds. and under).....\$ 42.92 | 32.08 |
| Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.).....\$ 43.24 | 32.08 |
| Roller Operator (five tons and under).....\$ 41.69 | 32.08 |
| Roller Operator (over five tons).....\$ 43.12 | 32.08 |
| Screed Person.....\$ 42.92 | 32.08 |
| Soil Stabilizer.....\$ 43.75 | 32.08 |

IRON0625-001 09/01/2019

Rates Fringes

Ironworkers:.....\$ 41.50 37.55
a. Employees will be paid \$.50 per hour more while working in
tunnels and coffer dams; \$1.00 per hour more when required to
work under or are covered with water (submerged) and when they
are required to work on the summit of Mauna Kea, Mauna Loa or
Haleakala.

LABO0368-001 09/02/2019

Rates Fringes

Laborers:
Driller.....\$ 39.05 21.52
Final Clean Up.....\$ 29.25 17.22
Guniting/Shotcrete Operator
and High Scaler.....\$ 38.55 21.52
Laborer I.....\$ 38.05 21.52
Laborer II.....\$ 35.45 21.52
Mason Tender/Hod Carrier....\$ 38.55 21.52
Powderman.....\$ 39.05 21.52
Window Washer (bosun chair).\$ 37.55 21.52

LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic
compressor; Asphalt Laborer, Ironer, Raker, Lute-man, and
Handroller, and all types of Asphalt Spreader Boxes;

Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and similar); Concrete Bucket Dumpman; Concrete Chipping; Concrete Chuteman/Hoseman (pouring concrete) (the handling of the chute from ready-mix trucks for such jobs as walls, slabs, decks, floors, foundations, footings, curbs, gutters, and sidewalks); Concrete Core Cutter (Walls, Floors, and Ceiling); Concrete Grinding or Sanding; Concrete: Hooking on, signaling, dumping of concrete for treme work over water on caissons, pilings, abutments, etc.; Concrete: Mixing, handling, conveying, pouring, vibrating, otherwise placing of concrete or aggregates or by any other process; Concrete: Operation of motorized wheelbarrows or buggies or machines of similar character, whether run by gas, diesel, or electric power; Concrete Placement Machine Operator: operation of Somero Hammerhead, Copperheads, or similar machines; Concrete Pump Machine (laying, coupling, uncoupling of all connections and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); Concrete Shovelers/Laborers (Wet or Dry); Concrete Screeding for Rough Strike-Off: Rodding or striking-off, by hand or mechanical means prior to finishing; Concrete Vibrator Operator; Coring Holes: Walls, footings, piers or other obstructions for passage of pipes or conduits for any purpose and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Forklift (9 ft. and under); Gas, Pneumatic, and Electric tools; Grating and Grill work for drains or other purposes; Green Cutter of concrete or aggregate in any form, by hand, mechanical means, grindstone or air and/or water; Grout: Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation;

Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry)(including mixer operator);Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and any other stationary-type of tubular device used for conveying of any substance or element, whether water, sewage, solid, gas, air, or other product whatsoever and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and paving of all ditches in preparation for laying of all pipes; Pipe laying of lateral sewer pipe from main or side sewer to buildings or structure (except Contactor may direct work be done under proper supervision); Pipe laying, leveling and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for

railroad track laying, highway construction, and the preparation of trenches, footings, etc., for cross-country transmission by pipelines, electrical transmission or underground lines or cables (by mechanical means); Raising of structure by manual or hydraulic jacks or other methods and resetting of structure in new locations, including all concrete work; Ramming or compaction; Rigging in connection with Laborers' work (except demolition), Signaling (including the use of walkie talkie) Choke Setting, tag line usage; Tagging and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and setting of other similar materials); Rotary Scarifier (including multiple head concrete chipping Scarifier); Salamander Heater, Drying of plaster, concrete mortar or other aggregate; Scaffold Erector Leadman; Scaffolds: (Swing and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko, Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers' work; Trucks (Refuse and Garbage Disposal) (from job site to dump); Vibra-Screed (Bull Float in connection with Laborers' work); Well Points, Installation of or any other dewatering system.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings

and all structures, with use of cutting or wrecking tools, breaking away, cleaning and removal of all fixtures, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Driller's Tender; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, establishing and removing portable roadway barricade devices); Signal Men on all construction work defined herein, including Traffic Control Signal Men at construction site; General Excavation; Backfilling, Grading and all other labor connected therewith; Digging of trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than ""Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unloading in storage area); Ground and Soil Treatment Work (Pest Control); Guniting/Shotcrete Operator Tender; Junk Yard Laborers (same as Salvage Yard); Laser Beam ""Target Man"" in connection with Laborers' work; Layout Person for Plastic (when work involves waterproofing for waterpools, artificial lakes and reservoirs); Limbers, Brush Loaders, and Pilers; Loading, Unloading, carrying, distributing and handling of all rods and material for use in reinforcing concrete construction (except when a derrick or outrigger operated by other than hand power is used); Loading, unloading, sorting, stockpiling, handling and distribution of water mains, gas mains and all pipes; Loading and unloading of all materials, fixtures, furnishings and appliances from point of delivery to stockpile to point of installation; hooking and signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and spreading of sub-grade material; Prestressed or precast concrete slabs,

walls, or sections: all loading, unloading, stockpiling, hooking on of such slabs, walls or sections; Quarry Laborers; Railroad, Streetcar, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Striper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and shoring, loading, signaling, right-of-way clearance along the route of movement, The clearance of new site, excavation of foundation when moving a house or structure from old site to new site; Utilities employees; Water Man; Waterscape/Hardscape Laborers; Wire Mesh Pulling (all concrete pouring operations); Wrecking, stripping, dismantling and handling concrete forms an false work.

LABO0368-002 09/02/2019

 Rates Fringes
Landscape & Irrigation
Laborers

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 26.15 | 13.45 |
| GROUP 2..... | \$ 27.15 | 13.45 |
| GROUP 3..... | \$ 21.55 | 13.45 |

LABORERS CLASSIFICATIONS

GROUP 1: Installation of non-potable permanent or temporary irrigation water systems performed for the purposes of

Landscaping and Irrigation architectural horticultural work; the installation of drinking fountains and permanent or temporary irrigation systems using potable water for Landscaping and Irrigation architectural horticultural purposes only. This work includes (a) the installation of all heads, risers, valves, valve boxes, vacuum breakers (pressure and non-pressure), low voltage electrical lines and, provided such work involves electrical wiring that will carry 24 volts or less, the installation of sensors, master control panels, display boards, junction boxes, conductors, including all other components for controllers, (b) and metallic (copper, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe including all work incidental thereto, i.e., unloading, handling and distribution of all pipes fittings, tools, materials and equipment, (c) all soldering work in connection with the above whether done by torch, soldering iron, or other means; (d) tie-in to main lines, thrust blocks (both precast and poured in place), pipe hangers and supports incidental to installation of the entire irrigation system, (e) making of pressure tests, start-up testing, flushing, purging, water balancing, placing into operation all irrigation equipment, fixtures and appurtenances installed under this agreement, and (f) the fabrication, replacement, repair and servicing of landscaping and irrigation systems. Operation of hand-held gas, air, electric, or self-powered tools and equipment used in the performance of Landscape and Irrigation work in connection with architectural horticulture; Choke-setting, signaling, and rigging for equipment operators on job-site in the performance of such Landscaping and Irrigation work; Concrete work (wet or dry) performed in connection with such Landscaping and Irrigation work. This work shall also include the setting of rock, stone, or riprap in connection with such Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons):

GROUP 2. Layout of irrigation and other non-potable irrigation water systems and the layout of drinking fountains and other potable irrigation water systems in connection with such Landscaping and Irrigation work. This includes the layout of all heads, risers, valves, valve boxes, vacuum breakers, low voltage electrical lines,

hydraulic and electrical controllers, and metallic (coppers, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe. This work also includes the reading and interpretation of plans and specifications in connection with the layout of Landscaping, Rockscape, Waterscape, and Irrigation work; Operation of Hydro-Mulching machines (sprayman and driver), Drillers, Trenchers (riding type, Davis T-66, and similar) and fork lifts used in connection with the performance of such Landscaping and Irrigation work; Tree climbers and chain saw tree trimmers, Sporadic operation (when used in connection with Landscaping, Rockscape, Waterscape, and Irrigation work) of Skid-Steer Loaders (Bobcat and similar), Cranes (Bantam, Grove, and similar), Hoptos, Backhoes, Loaders, Rollers, and Dozers (Case, John Deere, and similar), Water Trucks, Trucks requiring a State of Hawaii Public Utilities Commission Type 5 and/or type 7 license, sit-down type and ""gang"" mowers, and other self-propelled, sit-down operated machines not listed under Landscape & Irrigation Maintenance Laborer; Chemical spraying using self-propelled power spraying equipment (200 gallon capacity or more).

GROUP 3: Maintenance of trees, shrubs, ground covers, lawns and other planted areas, including the replanting of trees, shrubs, ground covers, and other plantings that did not ""take"" or which are damaged; provided, however, that re-planting that requires the use of equipment, machinery, or power tools shall be paid for at the rate of pay specified under Landscape and Irrigation Laborer, Group 1; Raking, mowing, trimming, and runing, including the use of ""weed eaters"", hedge trimmers, vacuums, blowers, and other hand-held gas, air, electric, or self-powered tools, and the operation of lawn mowers (Note: The operation of sit-down type and ""gang"" mowers shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer, Group 2); Guywiring, staking, propping, and supporting trees; Fertilizing, Chemical spraying using spray equipment with less than 200 gallon capacity, Maintaining irrigation and sprinkler systems, including the staking, clamping, and adjustment of risers, and the adjustment and/or replacement of sprinkler heads, (Note: the cleaning and gluing of pipe and fittings shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer(Group 1); Watering by hand or sprinkler system and the peformance of other types of gardening, yardman, and horticultural-related work.

LABO0368-003 09/02/2019

Rates Fringes

Underground Laborer

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 38.65 | 21.47 |
| GROUP 2..... | \$ 40.15 | 21.47 |
| GROUP 3..... | \$ 40.65 | 21.47 |
| GROUP 4..... | \$ 41.65 | 21.47 |
| GROUP 5..... | \$ 41.90 | 21.47 |
| GROUP 6..... | \$ 42.00 | 21.47 |
| GROUP 7..... | \$ 42.25 | 21.47 |

GROUP 1: Watchmen; Change House Attendant.

GROUP 2: Swamper; Brakeman; Bull Gang-Muckers, Trackmen; Dumpmen (any method); Concrete Crew (includes rodding and spreading); Grout Crew; Reboundmen

GROUP 3: Chucktenders and Cabletenders; Powderman (Prime House); Vibratorman, Pavement Breakers

GROUP 4: Miners - Tunnel (including top and bottom man on shaft and raise work); Timberman, Retimberman (wood or steel or substitute materials thereof); Blasters, Drillers, Powderman (in heading); Microtunnel Laborer; Headman; Cherry Picker (where car is lifted); Nipper; Grout Gunmen; Grout Pumpman & Potman; Gunite, Shotcrete Gunmen & Potmen; Concrete Finisher (in tunnel); Concrete Screed Man; Bit Grinder; Steel Form Raisers & Setters; High Pressure Nozzleman; Nozzleman (on slick line); Sandblaster-Potman (combination work assignment interchangeable); Tugger

GROUP 5: Shaft Work & Raise (below actual or excavated ground level); Diamond Driller; Gunite or Shotcrete Nozzleman;

Rodman; Groundman

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

PAIN1791-001 01/01/2019

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

Painters:

| | | |
|-------------------------|----------|-------|
| Brush..... | \$ 38.35 | 29.39 |
| Sandblaster; Spray..... | \$ 38.35 | 29.39 |

PAIN1889-001 07/01/2019

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

| | | |
|---------------|----------|-------|
| Glaziers..... | \$ 39.00 | 33.25 |
|---------------|----------|-------|

PAIN1926-001 03/03/2019

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

| | | |
|------------------------|----------|-------|
| Soft Floor Layers..... | \$ 34.15 | 29.32 |
|------------------------|----------|-------|

PAIN1944-001 01/01/2019

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

Taper.....\$ 42.60 28.15

PLAS0630-001 09/02/2019

| | Rates | Fringes |
|----------------|----------|---------|
| PLASTERER..... | \$ 42.64 | 30.58 |

PLAS0630-002 09/02/2019

| | Rates | Fringes |
|------------------------------|----------|---------|
| Cement Masons: | | |
| Cement Masons..... | \$ 41.10 | 30.68 |
| Trowel Machine Operators.... | \$ 41.25 | 30.68 |

PLUM0675-001 01/06/2019

| | Rates | Fringes |
|--|----------|---------|
| Plumber, Pipefitter, Steamfitter & Sprinkler Fitter.... | \$ 46.02 | 26.24 |

ROOF0221-001 09/01/2019

| | Rates | Fringes |
|--|----------|---------|
| Roofers (Including Built Up, Composition and Single Ply)..... | \$ 41.15 | 18.98 |

SHEE0293-001 09/02/2018

| | Rates | Fringes |
|-------------------------|----------|---------|
| Sheet metal worker..... | \$ 42.55 | 27.44 |

SUHI1997-002 09/15/1997

| | Rates | Fringes |
|--|----------|---------|
| Drapery Installer..... | \$ 13.60 | 1.20 |
| FENCE ERECTOR (Chain Link Fence)..... | \$ 9.33 | 1.65 |

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is

like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007

in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier. Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an

interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

APPENDIX C

**Labor Standards Interview Form
Standard Form 1455**

(1 page excluding this sheet)

LABOR STANDARDS INTERVIEW

| | | | | | | |
|---|--|------------|----------------------|---------------------|------------|-----------|
| CONTRACT NUMBER West Hawaii Sanitary Landfill GCCS SW-4543 | | | EMPLOYEE INFORMATION | | | |
| NAME OF PRIME CONTRACTOR | | | LAST NAME | | FIRST NAME | MI |
| NAME OF EMPLOYER | | | STREET ADDRESS | | | |
| SUPERVISOR'S NAME | | | CITY | | STATE | ZIP CODE |
| LAST NAME | | FIRST NAME | MI | WORK CLASSIFICATION | | WAGE RATE |

| ACTION | CHECK BELOW | |
|---|-------------|----|
| | YES | NO |
| Do you work over 8 hours per day? | | |
| Do you work over 40 hours per week? | | |
| Are you paid at least time and a half for overtime hours? | | |
| Are you receiving any cash payments for fringe benefits required by the posted wage determination decision? | | |
| WHAT DEDUCTIONS OTHER THAN TAXES AND SOCIAL SECURITY ARE MADE FROM YOUR PAY? | | |

| | | |
|--|---------------|--|
| HOW MANY HOURS DID YOU WORK ON YOUR LAST WORK DAY BEFORE THIS INTERVIEW? | TOOLS YOU USE | |
| | | |
| DATE OF LAST WORK DAY BEFORE INTERVIEW (YYMMDD) | | |
| DATE YOU BEGAN WORK ON THIS PROJECT (YYMMDD) | | |

THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE

| | | | |
|----------------------|-----------|-----------------------|---------------|
| EMPLOYEE'S SIGNATURE | | | DATE (YYMMDD) |
| INTERVIEWER | SIGNATURE | TYPED OR PRINTED NAME | DATE (YYMMDD) |

INTERVIEWER'S COMMENTS

| | | | |
|--|---|-----|----|
| WORK EMPLOYEE WAS DOING WHEN INTERVIEWED | ACTION (If explanation is needed, use comments section) | YES | NO |
| | IS EMPLOYEE PROPERLY CLASSIFIED AND PAID? | | |
| | ARE WAGE RATES AND POSTERS DISPLAYED? | | |

FOR USE BY PAYROLL CHECKER

IS ABOVE INFORMATION IN AGREEMENT WITH PAYROLL DATA?

☐ YES ☐ NO

COMMENTS

| | | | |
|-----------|------------|----|---------------|
| CHECKER | | | |
| LAST NAME | FIRST NAME | MI | JOB TITLE |
| SIGNATURE | | | DATE (YYMMDD) |

SECTION 01300 SUBMITTAL PROCEDURES

1.01 GENERAL

- A. Where required by the Standard Specifications for Public Works Construction, September 1986 and/or the Detailed Specifications, the Contractor shall submit descriptive information which will enable the Engineer to advise the County whether the Contractor's proposed materials, equipment or methods of work are in general conformance to the design concept and in compliance with the drawings and specifications.
- B. The information to be submitted shall consist of drawings, specifications, descriptive data, certificates, samples, test results and such other information, all as specifically required in the specifications.

2.01 CONTRACTOR'S RESPONSIBILITIES

A. General

- 1. Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. Submittals shall contain all required information, including satisfactory identification of items, units, and assemblies in relation to the contract drawings and specifications. The Contractor shall verify that the material and equipment described in each submittal conform to the requirements of the specifications and drawings.
- 2. Unless otherwise approved by the Engineer, submittals shall be made only by the Contractor, who shall indicate by a signed stamp on the submittals, that the Contractor has checked the submittals, and that the work shown conforms to contract requirements and has been checked for dimensions and relationship with work of all other trades involved.
- 3. If the information shows deviations from the specifications or drawings, the Contractor, by statement in writing accompanying the information, shall identify the deviations and state the reason(s) for the deviation(s).

4. The Contractor shall insure that there is no conflict with other submittals and shall notify the Engineer in each case where its submittal may affect the work of another contractor or the County. The Contractor shall insure coordination of submittals among the related crafts and subcontractors. To expedite the processing of submittals, the Contractor may authorize in writing a material or equipment supplier to deal directly with the Engineer or with the County with regard to a submittal. The Contractor, however, shall be responsible for the accuracy and completeness of information contained in all submittals.
5. All equipment and manufacturer's instruction submittals, including follow-up submittals, shall be submitted no later than 30 days following the Notice to Proceed no later than necessary to procure the item or avoid schedule delays as established in the Contractor's construction schedule.

B. Submittals shall be sent to the following address:

County of Hawai'i
Solid Waste Division
345 Kekuanaoa Street Suite 41
Hilo, Hawai'i 96720

Attention: Greg Goodale, Division Chief

C. Deviation From Contract

1. If the Contractor proposes to provide material which does not conform to the specifications and drawings, it shall indicate so under "deviations" on the submittal transmittal form accompanying the submittal copies. The Contractor shall prepare its reason for a change, including cost and time differential.

D. Submittal Completeness

1. Submittals which do not have all the information required to be submitted, including deviations, shall be considered as not complying with the intent of the contract and are not acceptable and will be returned without review.

2.02 SUBMITTAL SCHEDULE

- A. The Contractor shall provide a submittal schedule to allow coordination of review of the submittals in order that work may be accomplished within the specified contract time. Long lead Submittal Schedule shall be provided within ten (10) days after award of the Contract.
- B. A List of Submittals required for this project is found in Appendix herein. The list is provided as a guide for the Contractor and does not relieve the Contractor from providing any additional submittals which may be required to be provided in accordance with the Standard Specifications for Public Works Construction, September 1986 and/or the Detailed Specifications.

2.03 SUBMITTAL REQUIREMENTS

- A. Submit shop drawings, manufacturers' data and certificates for materials and have them approved before procurement, fabrication or delivery of the items to the job site.
- B. Partial submittals will not be acceptable and will be returned without review.
- C. Submittals shall include the manufacturer's name, trade name, catalog model or number, nameplate data, size, layout dimensions, capacity, project specification and paragraph reference, applicable industry and technical society publication references and other information necessary to establish contract compliance of each item the Contractor proposes to furnish.
- D. Contractor Authority:
 - 1. Submit a written certificate, dated and signed by an authorized corporate officer of the Contractor who is either a full-time employee, principal, or a full-time partner delegated with the authority to bind the Contractor in all matters relating to its professional work of the Contractor, evidencing the performance of any portion of the work, or any testing; as a condition precedent to the acceptance of any work or the result of any test.

2. Corporate credentials shall be furnished concurrently with applicable written certificates.
- E. Shop Drawings: Drawings shall be ANSI D (22 inches by 34 inches) in size, except as specified otherwise.
1. Drawings shall include sectional views and installation details of accessories identifying and indicating proposed location, layout and arrangement of accessories, piping and other items that must be shown to assure a coordinated installation.
 2. The Contractor shall review, stamp with his approval and submit, all Shop Drawings required by the Contract Documents or subsequently by the Engineer as covered by modifications. By approving and submitting Shop Drawings, the Contractor certifies that he has determined and verified all field measurements and obstructions, field construction criteria, materials, catalog numbers and similar data, that he has checked and coordinated each Shop Drawing with the requirements of the work and of the Contract Documents and that all equipment fits within designated spaces.
 3. At the time of submission, the Contractor shall inform the Engineer in writing of any deviation in the Shop Drawings from the requirements of the Contract Documents.
- F. Standards Compliance:
1. When materials or equipment must conform to the standards of organizations such as the American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), National Electrical Manufacturers Association (NEMA) and Underwriters Laboratories (UL), proof of such conformance shall be submitted to the Engineer for approval.
 2. If an organization uses a label or listing to indicate compliance with a particular standard, the label or listing will be acceptable evidence, unless otherwise specified in the individual sections.
 3. For materials and equipment whose compliance with organizational standards or specifications is not regulated by an organization using its own listing or label as proof of compliance, a certificate of compliance from the manufacturer shall be submitted for approval. The certificate shall identify the manufacturer, the product and the referenced standard and shall simply state that the manufacturer

certifies that the product conforms to all requirements of the project specification and of the referenced standards listed.

G. Certified Test Reports:

1. Before delivery of materials and equipment, certified copies of all test reports specified in the individual section shall be submitted for approval.
2. Whenever a regulatory agency performs inspections or tests of any portion of the work, a written certificate shall be furnished by the Contractor to validate the results from the respective inspection test.

H. Certificates of Conformance or Compliance:

1. A certification from the manufacturer attesting that materials to be furnished for this project comply with the requirements of this specification and of the reference publications shall be provided.
2. Preprinted certifications will not be acceptable; certifications shall be in the original.
3. The certification shall not contain statements that could be interpreted to imply that the product does not meet all requirements specified, such as "as good as"; "achieve the same end use and result as materials formulated in accordance with the referenced publication," "equal or exceed the service and performance of the specified material."
4. The certification shall clearly state that the product conforms to all of the requirements specified.
5. Whenever a regulatory agency performs inspections or tests of any portion of the work, a written certificate shall be furnished by the Contractor to validate the results from the respective inspection test.

I. Manufacturers' Certified Full Standard Product Warranty:

1. Submit the manufacturer's certified Full Standard Product Warranty terms and conditions applicable to all specified materials for the Engineer's approval prior to equipment delivery and commencement of equipment on-site installation.

2. All manufacturers' Full Standard Product Warranty Certificates are to be provided to the Engineer at the time of equipment delivery and prior to the commencement of installation.

J. Samples and Testing

1. Where required in the Specifications, and as determined necessary by the Engineer, samples of materials, appliances, and fittings to be used or offered for use in connection with the work shall be submitted to the Engineer at the Contractor's expense, with information as to their sources, with all cartage charges prepaid, and in such quantities and sizes as may be required for proper examination to establish the quality or equality thereof, as applicable.
2. All samples shall be submitted in ample time to enable the Engineer to make any examinations necessary, without delay to the work. The Contractor will be held responsible for any loss of time due to his neglect or failure to deliver the required samples to the Engineer, as specified.
3. Samples shall also be taken during the course of the work, as required by the Engineer.
4. Laboratory tests and examinations that the County elects to make in its own laboratory will be made at no cost to the Contractor, except that, if a sample of any material or equipment proposed for use by the Contractor fails to meet the Specifications, the cost of testing subsequent samples shall be borne by the Contractor.
5. All tests required by the Specifications to be performed by an independent laboratory shall be made at the sole expense of the Contractor.
6. Material used in the work shall conform with the submitted samples and test certificates as approved by the Engineer.

3.01 REVIEW PROCEDURES

- A. When the contract requires a submittal, the Contractor shall submit the specified information as follows to the Engineer for review:
 1. Two (2) copies of all the submitted information.

2. Two (2) sets of sample materials need be submitted, unless otherwise directed by the Engineer.
 3. Two (2) CD-ROMs of all submittal data shall be provided in Electronic Format (Adobe Acrobat and/or AutoCAD 2000 format) prior to final payment for the project. The electronic copy shall include all correspondence regarding the submittal and shall include signatures approving or disapproving the submittal.
 - a. Each submittal item shall be cataloged separately identified by the Submittal Number and a Brief Description of the submittal item.
- B. Unless otherwise specified, within fifteen (15) calendar days after receipt of the submittal by the Engineer, the submittal shall be reviewed and the Engineer shall return two (2) copies of the marked-up reproducible original noted in A.1 above. The returned submittal shall indicate one of the following actions:
1. If the review indicates that the material, or work method is in general conformance with the design concept and complies with the drawings and specifications, submittal copies will be marked "NO EXCEPTIONS TAKEN". In this event the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
 2. If the review indicates limited corrections are required, copies will be marked "MAKE CORRECTIONS NOTED". The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections. A corrected copy of the submittal shall be provided.
 3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "REVISE AND RESUBMIT". Except at his own risk, the Contractor shall not undertake work covered by this submittal until the submittal has been revised, resubmitted and returned and marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED".
 4. If the review indicates that the material, equipment, or work method is not in general conformance with the design concept or in compliance with the drawings and specifications, copies of the submittal will be marked "REJECTED". Submittals with deviations which have not been identified clearly may be rejected. Except at its own risk, the Contractor shall not undertake work covered by such submittals until a

new submittal is made and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED".

- C. No changes shall be made by the Contractor on re-submittals other than those changes indicated on the reviewed submittals, unless such changes are clearly described in a letter accompanying the re-submittal.

4.01 EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS

- A. The Engineer's review of drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of its responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the Engineer or the County, or by any officer, employee, or subcontractor thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed.
- B. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that the County has no objection to the Contractor, upon its own responsibility, using the plan or method of work proposed, or providing the material or equipment proposed.

Appendix A Minimum Submittal List

| Specification Section | Description | Comments |
|------------------------------|---|-----------------|
| | Refer to Technical Specifications for required submittals | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

****END OF SECTION****

SECTION 01310

CONSTRUCTION SCHEDULE

1.01 SCOPE

- A. This section specifies the procedures for preparing and revising a construction schedule used for planning and managing construction activities.
- B. The schedule provides a basis for determining the progress status of the project relative to the completion time, specific dates, and for determining the acceptability of the Contractor's progress payment estimates.
- C. Due to Fiscal Year constraints, this contract may not be fully executed until July 1, 2020. Due to the nature of the project, Contractor will be required to perform certain administrative work during award and contract execution phases. The goal is to secure all the approvals needed to start the project upon issuance of the Notice To Proceed.

2.01 DESCRIPTION

- A. The Contractor shall submit proposed work schedule using the Gantt chart format. In addition to the actual work on site, schedule shall indicate procurement of long lead items, fabrication, securing permits and other items that may affect schedule.

3.01 CONTINUITY OF SERVICES

- A. All work shall be sequenced such that all landfill functions remain operational during the construction process.
- B. All work shall be coordinated with SWD Personnel and approved by the Engineer to ensure all processes remain operational during the work.

4.01 SUBMITTAL PROCEDURES

- A. Within 10 working days after the date of the Award Letter, the Contractor shall submit a preliminary construction schedule conforming to this section and submittals for long lead item for County review and approval.
- B. Within 5 working days after the date of the Notice To Proceed, the Contractor shall submit a detailed construction schedule conforming to this section and representing in detail all planned procurement and on-site construction activities, and evidence that long lead items have been

placed on order to include estimated arrival on site.

- C. The schedule shall be prepared on reproducible paper and may be in draft form with legible freehand lines and lettering. Upon completion of the schedule, the Contractor shall submit the original and two (2) copies to the Engineer for review.

5.01 PROJECT STATUS UPDATE

- A. Project status review and update shall be provided each month and submitted with progress payment requests.
- B. Failure of the Contractor to comply with these requirements for submittal of the performance schedule and reports shall be cause for delay in review of progress payments by the Engineer.

5.02 SCHEDULE REVISIONS

- A. Revisions to the accepted construction schedule may be made only with written approval of the Contractor and County.
- B. Contract time extensions shall be incorporated into revised schedules, reflecting their effect at the time of occurrence.
- C. Changes in timing for activities which are not on the critical path may be modified with written agreement of the Contractor and Engineer.
- D. A change affecting the contract value of any activity, the timing of any activity on the critical path, the completion time and specific dates and work sequencing may be made only in accordance with applicable provisions of the specifications.

****END OF SECTION****

SECTION 01620

STORAGE AND PROTECTION OF MATERIALS

1.01 GENERAL

- A. Materials shall be shipped, handled, stored, and installed by methods which will prevent damage to the items. Damaged items will not be permitted as part of the work except in cases of minor damage that have been satisfactorily repaired and are acceptable to the Engineer.
- B. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary by the Engineer, they shall be placed on wooden platforms or other hard, clean surfaces, and not on the ground. Equipment, instruments and materials subject to vandalism and theft shall be placed under locked cover. Stored materials shall be located so as to facilitate prompt inspection.
- C. The Contractor shall be responsible for the providing suitable storage area(s) at the project site.

2.01 DELIVERY OF MATERIAL AND STORAGE OF MATERIALS AT SITE

- A. Have all materials delivered at the site in such quantities as will insure the uninterrupted progress of the work and the least obstruction of the premises and the adjoining property. Store materials where directed by the Engineer. The Contractor shall be responsible for all stored materials.
- B. The County's personnel or representatives of the County or Waste Management Hawaii will not accept material deliveries for the Contractor.

****END OF SECTION****

SECTION 01720
MEASUREMENT AND PAYMENT
(FOR BID AND ALTERNATIVE BID ITEMS)

PART 1 - BASIC BID ITEMS

1.1 BASIC BID ITEM 1 – MOBILIZATION/DEMOBILIZATION

- A. Basis of measurement: Lump Sum (LS). 50% payment at 10% completion of work; 90% payment at 50% completion of work; and 100% payment at 100% completion of work.
- B. Basis for payment: Includes mobilization and demobilization of equipment, materials, and labor as required to complete the work, prepare the Contractor staging area including all temporary control facilities and temporary controls (including but not limited to pollution control, traffic and safety control), coordination of the activities and the delivery of the construction materials and equipment required such that the construction of the collection system may begin the day after mobilization is complete and continue uninterrupted until completion, and any other administrative and travel costs necessary to complete work.
- C. Included in the demobilization is the complete cleanup of the job site and removal of all equipment.
- D. Maximum amount allowed for the Bid Item shall not exceed 50% of the sum of Base Bid Item No. 2 to 7. If the bid amount is submitted is greater than 50%, it will be reduced accordingly.

1.2 BASIC BID ITEM 2 – VERTICAL LFG WELL

- A. Basis of measurement: Vertical Foot (VF). Measurement shall be based upon the as-built well logs prepared by WMH or WMH Consultant. County shall have the right to view the logs and provided a copy as part of the progress payment request.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to drill a minimum 30-inch diameter borehole through non-asbestos waste and install a single well casing per the Design Plans and Technical Specifications SECTION 02002 LANDFILL GAS VERTICAL WELL INSTALLATION, complete in place.
- C. The Contractor shall supply all materials including the well casing, sealants and other materials shown in the Construction Drawings, excluding the soil backfill and the course aggregate. The soil backfill and course aggregate will be provided by WMH from on-site stockpiles.
- D. Contractor shall be responsible to haul the soil backfill material from an onsite stockpile identified by WMH. WMH will load the Contractors vehicles at the stockpiles Contractor shall haul drilling spoils and ancillary trash to the active workface of the landfill to be covered and compacted by the County at no cost to the Contractor.

- E. All drilling shall be conducted in accordance with the applicable State and local regulations.

1.3 BASIC BID ITEM 3 – WELLHEADS AND APPURTENANCES

- A. Basis of measurement: Each (EA). Measurement shall be based on each wellhead installed and accepted.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to install each QED wellhead, complete in place. The scope of work for this bid item includes the procurement, installation of 2-inch diameter wellheads and appurtenances on the new vertical LFG wells, and connection to the new HDPE lateral. Wellhead details are provided in Design Plans and Technical Specifications SECTION 02002 LANDFILL GAS VERTICAL WELL INSTALLATION, complete in place.

1.4 BASIC BID ITEM 4 – ABOVE GRADE 6-INCH HDPE PIPE

- A. Basis of measurement: Linear Foot (LF). Measurement shall be based upon as-built length of 6-in diameter HDPE lateral or header pipe installed as determined by the as- built measurement by Contractor and WMH.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to procure, install and pressure test the above-grade 6-in HDPE lateral and header pipe and fittings per the Design Plans and Technical Specifications SECTION 02001 LFG HEADER AND LATERAL PIPELINES, complete in place.
- C. Dirt, pipe shavings, and other debris shall be removed or flushed from the pipe prior to connecting the new headers/laterals to the existing Gas Collection and Control System (GCCS). Contractor shall not make final connection until given approval by WMH.
- D. This bid item also includes the procurement and installation of the 6-in blind flanges complete in place.

1.5 BASIC BID ITEM 5 – ABOVE GRADE 12-IN HDPE PIPE

- A. Basis of measurement: Linear Foot (LF). Measurement shall be based upon as-built length of 12-in diameter HDPE lateral or header pipe installed as determined by the as-built measurement by Contractor and WMH.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to procure, install, and pressure test the above-grade 12-in HDPE lateral and header pipe and fittings per the Design Plans and Technical Specifications SECTION 02001 LFG HEADER AND LATERAL PIPELINES, complete in place.

Dirt, pipe shavings, and other debris shall be removed or flushed from the pipe prior to connecting the new headers/laterals to the existing Gas Collection and Control System (GCCS). Contractor shall not make final connection until given approval by WMH.

This bid item also includes the procurement and installation of the 12-in blind flanges complete in place.

1.6 BASIC BID ITEMS 6 – HDPE PIPE SUPPORT FOR DRAINAGE

- A. Basis of measurement: Cubic Yard (CY). Measurement shall be per cubic yard.
- B. Basis for payment: The quoted price shall include full compensation for all labor and equipment need to support HDPE piping header identified in the Design Plans to promote positive drainage of condensate, complete in place. Includes “T” fence posts with OSHA approved safety caps spaced every 20 feet of pipe length..

1.7 Contractor will be required to haul soil from an onsite source as identified by WMH.

1.8 BASIC BID ITEM 7– TIE-INS TO EXISTING GCCS

- A. Basis of measurement: Each (EA). Measurement shall be per each tie-in made to the existing GCCS.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to connect the new header pipe to the existing GCCS, complete in place. This bid item shall also include proper and timely coordination with WMH for flare operations. Failure to coordinate the work will not be grounds for stand by costs.

PART 2 - ADDITIVE BID ITEMS

2.1 ADDITIVE ALTERNATE BID ITEM A1 - VERTICAL LFG WELL (ASBESTOS WASTE)

- A. Basis of measurement: Vertical Foot (VF). Measurement shall be based upon the as-built well logs. Verification of asbestos by the asbestos consultant and WMH is required for this bid item to apply. Actual quantity installed may be zero and this item will not be eligible for unit price adjustment.
- B. Basis for payment: Payment will be by the unit price quoted in the bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment that is described in Bid Item 2 plus the additional resources to drill through and manage the asbestos waste.
- C. Contractor shall wear the appropriate personal protective equipment (PPE), suppress dust levels, and contain the asbestos per the Asbestos Dust Mitigation Contingency Plan that will be issued as a Field Order and the requirements of the State of Hawaii Title 11, Hawaii

Administrative Rules, Department of Health, Chapter 501 Asbestos Requirements for Active Waste Disposal Sites.

- D. The asbestos waste shall be hauled by the Contractor to an onsite location as identified by the WMH. The County will cover the asbestos containing waste at no cost to the Contractor.
- E. Waste Management of Hawaii has attempted to locate the new wells outside of the known asbestos areas. However, it is possible that asbestos will be encountered during drilling operations. If encountered, the Contractor shall stop drilling and notify WMH's onsite construction manager. It is understood that certifications issued by Hawaii State Department of Health for personnel working in the asbestos exclusion zone shall be secured by the Contractor no later than the Notice to Proceed. Copy of certifications shall be submitted to WMH who in turn will provide a copy to the County. Please note that these certifications are not the same as the Asbestos Awareness Training identified in the notes below. Upon notification of potential asbestos containing materials (ACM), WMH will coordinate with their asbestos consultant to be onsite as soon as possible but no later than 24 hours to oversee the work.

2.2 ADDITIVE ALTERNATE BID ITEM A2 – STANDBY COST

- A. Basis of measurement: Hour (HR). Measurement shall be per each hour Contractor is on standby per the County's direction as a result of Additive Alternate Bid Item A2. Actual quantity installed may be zero and this item will not be eligible for unit price adjustment.
- B. Basis for payment: The quoted price shall include full compensation for all labor and equipment directed to be on standby per the County's directive. County will pay the Contractor actual standby hours or 8 hours whichever is less. No overtime payment will be made for standby costs.
- C. It is understood that if there is an issue with the well being drilled, the Contractor shall move to the next well while WMH, in consultation with the County, is working on the Field Order. This bid item will be applicable only if there are no more wells to be drilled.

2.3 ADDITIVE ALTERNATE BID ITEM A3 – CREW ACCOMMODATIONS

- A. Basis of measurement: Day (DAY). Measurement shall be per each additional overnight stay required by the Contractor per each 8 hours of standby. Actual quantity installed may be zero and this item will not be eligible for unit price adjustment.
- B. Basis for payment: The quoted price shall include full compensation for all meals, vehicle rentals, and lodging expenses incurred by the Contractor due to a standby duration lasting longer than 8 hours. Accommodations shall not be billed to the County for standby time lasting less than 8 hours.

2.4 ADDITIVE ALTERNATE BID ITEM A4 - REFUSAL

- A. Basis of measurement: Vertical Foot (VF). Measurement shall be based upon sounding of the borehole by WMH and Contractor prior to backfilling. Actual quantity installed may be zero and this item will not be eligible for unit price adjustment clause in the General Conditions
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to drill a min. 30-in diameter borehole and abandon the hole.
- C. The Contractor shall alert WMH onsite construction manager if an obstruction is reached during drilling such that the well cannot be completed as set forth in the Design Plans and Technical Specifications.
- D. WMH shall determine whether the borehole has reached a sufficient depth for its intended function. If the well is not sufficiently deep, Contractor shall abandon the hole by backfilling it with clean soil and foam seal two feet thick to be place in the boring four feet from the surface and the borehole capped with compacted clean soil.

PART 3 - OTHER NOTES

- A. Survey, CQA services, construction management, and asbestos monitoring are not part of this scope. WMH will provide or contract these services to others. Contractor shall be required to coordinate thier work with WMH or WMH consultants. No extra payment will be made for this item and shall be considered incidental costs to the price of the various Basic and Additive Bid Items.
- B. All contractor employees will be required to complete the WMH Contractor LFG Safety module at a WMH site and pass an exam at the end of the module prior the start of construction. A certificate will be issued upon successful completion. The module will take approximately 30-45 min per sitting. Contractors will be required to plan accordingly. LFG Safety Orientation is available online at: <http://www.wmsafetyportal.com/>.
- C. If applicable, WMH will provide one NIOSH Class IV Asbestos Awareness Training prior to the start of subsurface work. This awareness training takes approximately 2 hours to complete. Please note that this training does not certify the contractor to handle the asbestos. Personnel not attending this training will be required to submit a NIOSH Class IV training certificate at Contractor's cost prior to performing work.
- D. Prior to starting any excavation or drilling, Contractor shall review the location and depth of all well locations in reference to the base grades provided in Design Plans to confirm that drilling will not penetrate the underlying liner system.
- E. WMH will provide an onsite source of water for dust control and asbestos management practices. Contractor will be limited to 3000 gallons of water per day unless approved by the County. Water available on site is brackish.

- F. Site conditions and topography may have changed since date of the aerial fly over. Locations of the wells may change to accommodate current site conditions per WMH approval.
- G. Work shall not vary from the Design Plans for Technical Specifications without first securing written approval of WMH. Work that varies from design without approval will not be accepted.
- H. The Contractor shall procure all the materials need to complete the scope-of-work identified in the Design Plans, except for the County or WMH furnished items identified in the bid item descriptions.
- I. Required testing shall not be paid for separately but shall be considered incidental to the price of the various Basic and Additive Bid Items.
- J. Certain Bid Items shall not qualify for unit price adjustment as set forth is Section 4.2 of the GR&C and Special Provisions.
- K. The Contractor shall have a valid Hawai'i Contractor's "A" License.

END OF SECTION

SECTION 02001
LFG HEADER AND LATERAL PIPELINES
(WMH REV 1. 7/28/2016)

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Use this specification for header and lateral pipeline selection and construction.
- B. Header and lateral pipelines are a critical element of the GCCS. Header and lateral pipelines must be: installed using the correct materials; properly sized; durable enough to survive in a landfill environment; constructed to minimize leaks; installed at proper alignment and grade; and allow for future expansions.

PART 2 - SAFETY

- 2.1 Warning: Take all steps necessary to ensure worker safety during GCCS construction. Contractor shall undergo WMH's contractor safety orientation prior to commencing work.

PART 3 - SUBMITTALS

- 3.1 Submit material data sheets for approval prior to ordering per Submittal Procedures Specification.
- 3.2 Contractor shall submit a plan detailing how pipe tests will be conducted including a list of all equipment and materials that will be utilized. The plan shall indicate how, if any, the plan deviates from this Specification.
- 3.3 Contractor Equipment Certifications. All testing equipment shall be certified and calibrated.
- 3.4 Test Reports. Air Testing Form

PART 4 - MATERIALS

4.1 PIPE

- A. Piping Material: High Density Polyethylene (HDPE) shall be manufactured with PE4710 resin that conforms to ASTM D3350 with the cell classification of 445574C and listed with the Plastic Pipe Institute's (PPI) TR4. Piping shall have a minimum of 2% carbon black for UV resistance.
- B. Pipe Sizing:
 - 1. HDPE piping shall meet standard IPS sizes per ASTM F714.

2. SDR 26 HDPE for pipe sizes greater than or equal to 12 inches in diameter.
 3. SDR 17 HDPE for pipe sizes smaller than 12 inches in diameter.
 4. SDR 9 HDPE shall be used for high pressure air lines. Isolation valves for air lines and force mains shall consist of HDPE flanged ball valves.
- C. HDPE fittings and transitions shall meet ASTM D3261. Fittings shall be molded for pipe sizes 12 inches in diameter or smaller. For larger diameter pipe use full-sized fabricated fittings with pressure ratings equal to or greater than the pipe.
- D. Pipe Identification: Markings shall be printed on the pipe at intervals no less than every 5 feet and shall identify the following: pipe manufacture; nominal pipe size; dimension ratio; PE type; and ASTM conformance.
- E. Piping shall be stored onsite per the manufacture's recommendations.
- F. Gouges or cuts into the pipe that exceed 25% of the pipe wall thickness shall be removed by cutting out the section and re-welding the pipe.
- G. Branch saddle connections shall not be used.
- H. Electrofusion couplings shall meet ASTM F1055.
- 4.2 ROAD CROSSING
- A. Road Crossings: 16-gauge CMP or ADS-12 that is 4 inches larger than the header/lateral pipe shall be use to protect the header/lateral from overbearing traffic.
- B. Shall be rated for AASHTO H-20 and H-25 Loads with 12" of cover material.
- 4.3 PIPE TESTING
- A. Provide air compressor flanges, caps, gauges, bulkheads and monitoring apparatus as necessary to complete the pressure test.

PART 5 - INSTALLATION

5.1 PIPE

- A. Piping shall be inspected upon arrival and prior to installation for cosmetic defects (grooves, pits, hollows, etc.). Damage to or obstructions within the pipe shall be repaired or discarded.
- B. Minimum Header Slope:
1. Headers laterals shall be graded to slope towards the condensate sump(s). At no point shall there be localized low points that will trap condensate.
 2. 1% on native soil or engineered fill. 2% in countercurrent flow conditions
 3. On side slopes a minimum 4% within the limits of waste. 5% in countercurrent flow conditions.

4. On the top deck of the landfill, headers and laterals shall be placed such that liquids flow towards the flare and will not be trapped within the pipe. A 1% minimum grade shall be maintained, except for the road crossings (if used) which shall meet the grades noted Design Drawing.
 5. Piping shall be surveyed upon completion. Surveyed piping grades shall meet the above minimum requirements unless approved by WMH. Shallower slopes within the waste limits can be installed; however, this could lead to future grading adjustments or condensate sump installations and must be approved by WMH prior to installation.
- C. Minimum Main Header Diameter: 12 inches SDR 26 HDPE(actual sizes are determined by detailed design)
 - D. Minimum Lateral Diameter: 6 inches SDR 17 HDPE laterals shall be installed across top decks to accommodate localized settlement. Install laterals as prescribed on the Design Plans.
 - E. Install header pipelines to accommodate the expansion and contraction of the pipe. Piping placed on slopes shall have support stakes placed every 30 feet to keep the pipe from slumping and forming a low spot. Stakes shall be sleeved or capped for safety. Rebar stakes with PVC casings are acceptable. Alternatively, earthen mounds shall be placed over the piping every 30'. Coverage should be over a minimum of 5' of pipe and shall have a cover thickness of a minimum 12" over the top of the pipe.
 - F. Headers and laterals shall be placed on top of the landfill existing cover such that liquids flow towards the flare and will not be trapped within the pipe. A minimum 1% grade shall be maintained, except FOR the road crossing which shall meet the grades noted in the Design Plans.
 - G. If trenching is used. The WMH will supply on-site materials for the pipe bedding free of charge. All pipe bedding to be a minimum of 3" in thickness around the piping when buried,
 - H. Maximum Bending Radius: 20 to 40 times the pipe diameter per manufacturer standards.
 - I. Butt Fusion Welding: performed in accordance with ASTM D2657 and PPI Technical Report TR-33/2005. Pipe shavings, mud/dirt, debris shall be remove from piping prior to welding.
 - J. Electrofusion Welding: Used of these couplings shall be only with prior written approval by WMH. Installation shall follow manufactures recommendations. WMH or CQA shall be notified prior to installing the coupling for inspection of pipe preparation.
 - K. Mechanical Connections: Connections to auxiliary equipment (pumps, flare, tanks, valves, etc.) shall consist of the following:
 1. A polyethylene flange shall be thermally butt-fused to the stop end of the HDPE pipe.
 2. A full-face neoprene or nitrile (Buna N) gasket shall be placed between the flange connections.
 3. Ductile iron backup rings and cadmium or zinc plate bolts, nuts, and washers shall be used. 316 or 304 stainless steel shall be used in corrosive environments as approved by WMH.
 - L. Surface Water Drainage: Header/laterals shall not be installed across drainage channels without prior written approval by WMH.

- M. Pressure Testing: Headers and laterals shall be pressure tested in accordance with these specifications. Pipe pressure testing shall be the responsibility of the Contractor and shall be considered incidental to the contract prices for all HDPE.
- N. Abandoned Lines: Shall be removed entirely or shall be capped per WMH direction.
- O. Trenching: Pipe trenches shall not exceed 4 feet in depth without WMH approval. Trench subgrade shall be smooth and level. Particles greater than 6 inches shall be removed from the backfill. HDPE pipe must be at the temperature of the surrounding soil at the time of backfilling and compaction.

5.2 PIPE TESTING

A. PREPARATION

1. Commence test procedures when following conditions have been met.
 - a. Pipe section to be tested is clean and free of dirt, sand or other foreign material.
 - b. Seal pipe ends with fused end caps or blind flanges.
 - c. Add pressure slowly.
 - d. Pressurizing equipment shall include regulator set to avoid over-pressurizing and damaging otherwise acceptable line.
2. Provide necessary piping connections between section of line being tested and air supply, together with test pressure equipment, meters, pressure gauge, and other equipment, materials, and facilities necessary to make specified tests.
3. Furnish and install bulkheads, flanges, valves, bracing, blocking or other temporary sectionalizing devices that may be required.

B. TESTING EQUIPMENT

1. Provide equipment for this testing procedure.
2. Testing Equipment:
 - a. Polyethylene flange adapter with steel blind flange.
 - b. Temperature gauge (0°C to 100°C) tapped and threaded into blind flange.
 - c. Pressure gauge (0 to 15 psig).
 - d. Inlet valve to facilitate air pressure to pipe.
 - e. Ball valve to release pipe pressure at test completion.
 - f. Polyethylene reducers to be used to adapt test flange to size of pipe being tested.
 - g. Air compressor shall provide adequate air supply for testing.
 - h. Pressurizing equipment shall include a regulator set to avoid over-pressurizing and damaging otherwise acceptable pipe.
3. Provide verification and results of gauge calibration performed less than 60 days prior to test.

C. TESTING

1. Owner shall be given 24-hr notification prior to test.
2. Appropriate safety precautions must be in-place.
3. Pipe Test Segments:
 - a. Butt-fusion welded pipe segments.
 - b. Maximum test section length: 2,000 lineal feet.
 - c. Provide blind flange with test apparatus on one end and fused cap or blind flange assembly on opposite end.
4. Environment:

- a. Bury test segment or lay test segment on ground surface and allow it to reach ambient temperature before test.
- b. Perform test during period when pipe segment will be out of direct sunlight to minimize pressure changes as a result of temperature fluctuations.
- 5. Test:
 - a. Apply test pressure of 10 psig to test segment.
 - b. Observe test pressure for 1-hour.
 - c. Correct pressure drop for temperature change.
 - d. Pressure drop over 1-hour period should not exceed 1%.
 - e. If retest is necessary, allow pressure to relax to 0 psig for a minimum of 8 hours prior to retest.
- 6. Test Failure:
 - a. If retest is necessary, allow pressure to relax to 0 psig prior to retest.
 - b. Perform the following when pipe segment fails test.
 - c. Check entire length of pipe and fusion welds for cracks, pinholes, perforations or other possible leakage points.
 - d. Check blocked risers and capped end for leakage and check gaskets at blind flanges.
 - e. Verify leaks by applying soap water solution and observe for bubble formation.
 - f. Repair pipe and fused joint leaks by cutting out leak area and re-welding suitable replacement segments.
 - g. After leaks are repaired, retest.
- 7. Remove temporary sectionalizing device after tests have been completed.

D. TEST REPORTING

- 1. Each test shall be reported in writing to WMH with 24 hours of completing each test. Provide report Air Testing Form shown below.
- 2. Include following information if failure occurs:
 - a. Location of failure segment.
 - b. Nature of leaks.
 - c. Details of repairs performed.
 - d. Retest results.

E. TEST FORM EXAMPLE

HDPE PIPE PRESSURE TEST REPORT

Project Name/No.: _____ Date: _____

Contractor: _____ Time: _____

Person Performing Tests: _____

Description/Location of Test Segment: (Pipe Diameter, Length, and SDR's)

| | |
|-------------------------------|-------------|
| Location of Pipe Test Segment | |
| Station From: | Station To: |

T_i = Initial Temperature = _____ °F
 P_i = Initial test pressure = _____ psig
 P_c = Initial Pressure in psig corrected for temperature (T_i) at time "t"
 t = Time in minutes from initiation of test
 T_t = Temperature in °F at time 't'
 P_t = Test pressure in psig at time 't'

$$P_c = \frac{(P_i + 14.7)(T_t + 273)}{(T_i + 273)} - 14.7$$

$$\text{Percent Pressure Drop} = \frac{P_c - P_t}{P_c} \times 100$$

| | T_t Temp | P_t Gauge | P_c Corrected | Pressur e Drop |
|---------------|-----------------|--------------------|--------------------|----------------------|
| Time (min) | Reading (°F) | Pressure (psig) | Pressure (psig) | Drop (%) |
| 0 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |

Pass/Fail: _____ Retest (yes/no) _____

Description/Nature of leaks and repair of retest segment: _____

PART 6 - MEASURE AND PAYMENT

- A. HDPE lateral or header pipe installed as determined by the as-built measurement by Contractor and WMH.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to procure and install above-grade HDPE lateral and header pipe and fittings per the Design Plans and Technical Specifications, complete in place.
- C. Dirt, pipe shavings, and other debris shall be removed or flushed from the pipe prior to connecting the new headers/laterals to the existing Gas Collection and Control System (GCCS). Contractor shall not make final connection until given approval by WMH.
- D. This bid item also includes the procurement and installation of the blind flanges complete in place.

END OF SECTION

SECTION 02002
LANDFILL GAS VERTICAL WELL INSTALLATION
(WM REV 2. 7/28/2016)

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Use this standard operating procedure (SOP) to install vertical landfill gas (LFG) collection wells. This specification uses both the traditional bentonite seals with Foam Concepts Foam Sealant as well as the traditional bentonite seal.
- B. Drillers and construction quality assurance (CQA) consultants are to utilize this procedure to ensure proper completion of vertical gas collection wells with foam seals.
- C. Use this section for the installation of Landfill Gas Extraction Wellheads.

PART 2 - SAFETY

- 2.1 Take all steps necessary to ensure worker safety. Drilling contractors and CQA consultants shall provide documentation of completion of WM Safety and Contractor Training for all individuals who perform work on the site.
- 2.2 Contractor to provide one certified person with Asbestos Awareness Training or equivalent to observe all drilling activities to recognize if asbestos material is encountered. If asbestos material is encountered, immediately stop drilling activities and verbally notify WMH, followed by a written notification and copy the County.

PART 3 - SUBMITTALS

- 3.1 Submit material data sheets for approval prior to ordering per Submittal Procedures Specification.
- 3.2 Contractor will provide Landfill Gas Extraction Wellhead product data including installation procedures for review and approval by the WMH Engineer prior to initiation of well construction.

PART 4 - CONSTRUCTION QUALITY ASSURANCE

4.1 General Requirements:

- A. A well log shall be completed by the WMH CQA consultant for each well using the attached format at the end of this section.

1. Prior to drilling, review the project specifications. Verify material quantity and quality are appropriate and in accordance with project specifications including:
 - a. Aggregate
 - b. Soil backfill
 - c. Solid and perforated pipe
 - d. Pipe couplings and end caps
 - e. CPVC primer and glue
 - f. Lag bolts
 - g. Foam seal
 - h. Bentonite Seal
 - i. All other materials.
2. The WMH CQA representative shall provide documentation for all materials in the completion report. Immediately notify the WM representative of any material shortages or quality issues prior to beginning work. The WM representative shall provide the 8-character LGMS ID for each well. The driller and WMH CQA professional shall utilize these IDs and the alias well ID (as identified on site permit documents/drawings) in all references to the well.
3. To provide WM with enhanced temperature profile information for all extraction well installations, the WMH CQA representative (includes either outside consultant or WM personnel) or drilling contractor must determine waste temperature of the exhumed waste with use of a thermometer with an extended stem (minimum 36 inch in length). Grainger Item No. 3LPU9, REOTEMP, bimetal with 3-inch dial, 0-200 degrees F, is an approved device. Temperature must be determined at a minimum 10-foot interval. Take temperatures immediately as the waste exits the bore (to secure the highest temperatures evident). Document these values on the drill log associated with this SOP.

PART 5 - MATERIALS

5.1 CPVC PIPE

- A. Piping Material: Shall be manufactured from a Type IV, Grade I Chlorinated Polyvinyl Chloride (CPVC) compound with a Cell Classification of 23447B per ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM F441. Pipe Identification: Markings shall be printed on the pipe at intervals no less than every 5 feet and shall identify the following: pipe manufacture; nominal pipe size; dimension ratio; PE type; and ASTM conformance.
- B. Pipe Sizing:
 1. 6" diameter SCH 80 CPVC Solid
 2. 6" diameter SCH 80 CPVC Perforated per the Design Plans.

5.2 CPVC FITTINGS

- A. HDPE fittings and transitions shall be manufactured from CPVC material which meets or exceeds the requirements of ASTM D-1784, Type IV, Grade 1, cell classification 23447B.

5.3 CPVC Solvent Cement and Welding Rod

- A. All solvent cements used, to conform to ASTM D-2564, listed by NSF for potable use applications.
- B. If CPVC welding rod is going to be used, provide materials, techniques, certification for technician and equipment list.

5.4 PVC PIPE

- A. PVC pipe shall be Schedule 80, Type I, Grade 1, or Class 12454 B, conforming to ASTM D1784.
- B. Joints shall be socket-solvent welded, except where connecting to unions, valves, and equipment with threaded connections that may require future disassembly.
- C. Fittings shall be Schedule 80, as specified above. Fittings shall conform to the requirements of ASTM D2467 for socket type and ASTM D2464 for threaded type.

5.5 BENTONITE

- A. 8 mesh - PDS Granular Seal or Baroid Benseal® or approved equal.

5.6 FOAM SEAL

- A. Foam shall be from Foam Concepts, LLC in Cloquet, MN
- B. Foam seals should not be used when there is elevated liquid within the borehole, the landfill temperature exceeds 200°F, or permits require bentonite seals.

5.7 QED 2" WELLHEAD AND APPURTENANCES

- A. A 6-inch by 4-inch Fernco Flexseal coupling with 2-inch bushing or approved equal.
- B. 2" QED Model ORP215 wellhead and as described in the Design Drawings.
- C. 2" QED vertical plate kit Model 40650
- D. 6" x 2" QED stabilizer well cap Model GWC62
- E. 2" QED Solarguard™ Flex hose and stainless steel clamps. Model 40947 (5' length) with QED Stainless Steel banding Kit Model 40979
- F. HDPE reducing fittings to connect well to 6-inch lateral.

PART 6 - INSTALLATION

6.1 WELL INSTALLATION.

- A. Complete the well bore to the plan depth. Should difficulty in completion arise due to refusal, the CQA professional and/or Contractor shall contact the WM representative to determine if the well should be abandoned, completed at the current depth, or additional time should be spent attempting further advance of the hole. If abandoned, the hole shall be backfilled with soil with a 2- ft bentonite or foam seal.
- B. Prepare the perforated and solid schedule 80 CPVC pipe for insertion into the boring. All pipe joints are to be both glued and bolted with four ¼ x 1" lag bolts unless otherwise specified. Use caution to protect glue from the cold per manufacturer's instructions. Predrill pilot holes for the bolts to prevent pipe damage.
- C. Place a base depth of one to two feet of aggregate in the hole.
- D. Ensure a CPVC end cap with a one-inch hole in the center is properly installed on the end of the CPVC pipe.
- E. Suspend the pipe in the center of the hole and allow it to rest on the aggregate. Verify at least 9-inches of clearance between the pipe and waste mass on all sides. Holes in excess of 100 feet in depth shall utilize bow spring type centralizers (e.g. two-part model available from Energyneering Solutions via ISCO) installed on each 20-foot pipe joint to within 80-feet of the top of the borehole.
- F. Begin to backfill the well bore with 1 to 3-in aggregate. The required quantity of aggregate and soil backfill material shall be pre-calculated based on the dimensions of the boring. To ensure no bridging of material has occurred, CQA personnel shall verify actual quantities used are similar to the estimated quantity. After the lower portion of the pipe is held in position by the backfill, the pipe is to be placed under a slight tension to remove any curvature and bowing. Ensure the well bore pipe remains in the center of the hole throughout the backfill process.

- 6.2 Ensure placement of additional aggregate is uniform around the well pipe by alternating "backfill units" at points varied by about 180-degrees (do not place all fill from one side). To allow quantification of backfill to the hole, place two "backfill units" (loader buckets or other chosen standard of field measure) then re-verify the depth to determine the average volume per backfill unit (based on the hole diameter/volume subtracting pipe volume of well bore). Again crosscheck the quantity placed versus estimated and proceed, verifying no bridging is occurring, until reaching the elevation approximately 5-feet above the top or last perforations.

6.3 BENTONITE SEAL

- A. Bentonite seal placement is a multiple step process. A geotextile separation layer is not required between aggregate and bentonite when blended as described. It is critical that pre-hydration is performed at the surface (in proper ratio with water), prior to placement in the well. Coarse granular bentonite "chips" (3/8-inch to 3/4-inch) and fine granular bentonite (8-mesh) are both required. (Note: Follow the same practice when developing "clay plug" seals for use elsewhere at the landfill.) Mortar boxes, mortar "hoes", equipment buckets free of deleterious materials or contamination, or similar means are to be used for hydration. This will result in a high solids content of bentonite before placement (a minimum 60% bentonite to maximum 40% water). Never attempt to hydrate by adding water down the borehole to bentonite placed "dry" below. The steps for pre-hydration are as follows:
- B. Place 24 gallons of water into the mortar box or equipment bucket. Avoid the use of water with high chloride (salt) levels (> 1500 ppm). Use a 5-gallon bucket to measure the water properly. (Note: Be aware the fill line for most buckets is below the "grip line" molded on most such buckets, as many styles typically hold 6-gallons when filled to the top.)
- C. Add 32 ounces (one quart) of PDS Super Mud or 4 ounces of Halliburton Quick Mud® D-50 viscosifier/borehole stabilizer polymer (these quantities/ratios are critical) to the water (required as a temporary delay to hydration of the bentonite while mixing). Note: Avoid glove (or skin) contact with the polymer, as it is very sticky. Mix thoroughly with the water (for at least one minute) until observed to be uniform in color.
- D. Add 2 bags of 3/8-inch sodium bentonite "chips" (50 pounds each of PDSCo Plug or Baroid Hole Plug® or equivalent) to the water polymer mixture. Vigorously mix the combination of chips, water and polymer until observed to be uniform in color throughout with varied texture, as the chips will still be clearly discernable.
- E. Add one 50-pound bag of granular sodium bentonite (8 mesh- PDS Granular Seal or Baroid Benseal® or equivalent). Again, mix vigorously until thoroughly blended and uniform in color with varied texture, as the chips will still be clearly discernable. The resultant mixture should be approximately the consistency of heavy oatmeal thus remaining very "flowable" and ready to place.
- F. Each "batch" (as described above) is sufficient to develop either:
 1. a 6-inch seal thickness within a 36- inch bore holding an 8-inch Schedule 80 CPVC pipe.
 2. a 8.5-inch seal thickness within a 30-inch bore holding a 6-inch Schedule 80 CPVC pipe.
- G. Repeat this process a minimum of four times to produce a 2-foot bentonite seal as required. Therefore, a total (minimum) of 8-bags of 3/8-inch bentonite chips and 4-bags of granular bentonite along with 128 ounces of polymer and 96 gallons of water are required for each 2-foot completed seal. Note: Full-pallet quantities of bentonite typically hold 48 bags and weigh 2,400 pounds.
- H. Place the bentonite mixture uniformly around the circumference of the well bore pipe, by free fall, until sufficient material has been introduced to the hole to complete the minimum uniform 2-foot thick well seal. As before, ensure placement is uniform around the well pipe by alternating backfill units at points varied by approximately 180-degrees (do not place all bentonite from one side).

- I. Confirm the thickness of the bentonite seal by measurement. Add additional prehydrated bentonite as required until the seal is fully developed. Wait at least 20-minutes for the bentonite to hydrate fully before placing soil backfill.
- J. Place soil backfill uniformly around the circumference of the annulus, to fill the area between the lower and upper bentonite seal with no bridging of fill materials. Again, this can be accomplished by alternating backfill units at points varied by approximately 180-degrees (do not place all fill from one side). Soil used for backfill shall typically be free flowing (such as a silty-sand versus clay). It is to be free of; clumps, frozen soils, saturated soils, boulders, or foreign objects that would impair placement or cause undue settlement or air intrusion over time. Fill to within 5 feet of the surface in preparation of the upper foam seal.

6.4 FOAM SEAL

- A. Foam shall be from Foam Concepts, LLC in Cloquet, MN. Review manufacturer technical information provided in each box of foam for detailed mixing and installation instruction. The following are general instructions for mixing and installing foam seals in the wells:
- B. Remove the foam from the shipping box and outer bag.
- C. Place the bag on a flat clean work area to minimize puncturing the bag during mixing.
- D. Remove the center white divider and discard.
- E. Mix the two chemicals together by lifting the bag by two corners and rotating.
- F. Knead the bag vigorously for about 40 – 60 seconds until the chemicals are mixed to a consistent cream color. Pay attention the liquid in the corners is adequately mixed.
- G. Remove the 6" cap from the gas well. This will allow pressure relief and prevent gas from blowing through the seal as it is curing.
- H. Move to the borehole and cut across the corner of the bag creating a 3" to 5" hole.
- I. Once the reaction begins and the contents begin to expand, allow the foam to rise up and out of the bag and into the hole. Evenly distribute the foam around the gas well. Minimize the amount foam contacting the pipe and well sidewalls. Never upend the bag and pour the foam until the contents have stopped expanding out of the bag.
- J. Depending on ambient temperature, it may take up to 10-minutes for the foam to set. The foam is ready for the next layer when a small rock bounces off the foam.
- K. When adding the second and any subsequent layers of foam, repeat the procedure described above and apply directly onto the previous layer until the desired thickness is attained.
- L. Each well seal requires two bags of foam (i.e., two bags for the lower seal and two bags for the upper seal). If the seal integrity is questionable for any reason, add another bag.
- M. Confirm the thickness of the foam seal by measurement. Wait at least 20-minutes for the foam to cure before placing soil backfill.

- N. Backfill the well annulus above the lower seal with 3-in minus soil. Ensure placement of the soil is uniform around the well pipe during the backfill process. Soil shall typically be free flowing such as a silty-sand versus clay. The soil shall be free of clumps, frozen soils, saturated soils, boulders, or other objects that could cause damage, impair placement or result in undue settlement or air intrusion over time. Fill to within 7 to 5 feet of the surface.
- O. Install the upper foam seal at the waste/cover interface (generally located between 5 – 7 feet below ground surface) using the method described above. Backfill any remaining distance to the surface with soil. Backfill soil shall be tamped down for compaction in 12" lifts.
- P. Terminate the well bore pipe approximately 3 feet above grade and install the wellhead at "normal" height desired for tuning. Valve on wellhead shall remain closed unless instructed by WM.
- Q. Affix identification label (or other means of permanent identification) to the well bore pipe denoting the LGMS ID.
- R. The use of a foam seal negates the requirement to install a well safety grate unless otherwise required by special circumstances.
- S. The CQA professional shall note the water level the first business day after well completion.

6.5 WELLHEAD INSTALLATION

- A. Landfill Gas Extraction Wellheads:
 - 1. Remove temporary PVC cap from previously installed wells.
 - 2. Install 6-inch by 4-inch Fernco Flexseal coupling with 2-inch bushing or approved equal.
 - 3. Install wellhead according to Manufacturer's Specifications.
 - 4. Install 2-inch hose using stainless steel clamps.
 - 5. Install HDPE reducing fittings to connect well to 6-inch.
 - 6. The wellhead shall be installed at a manageable elevations (approximately three feet above existing grade) to support maintenance and monitoring operations.
 - 7. Follow grading in accordance with the drawings.

PART 7 - MEASURE AND PAYMENT

7.1 VERTICAL WELL

- A. Basis of measurement: Vertical Foot (VF). Measurement shall be based upon the as-built well logs prepared by WMH or WMH Consultant. County shall have the right to view the logs and provided a copy as part of the progress payment request.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to drill a minimum 30-inch diameter borehole through non-asbestos waste and install a single well casing per the Design Plans and Technical Specifications, complete in place.

- C. The Contractor shall supply all materials including the well casing, sealants and other materials shown in the Construction Drawings, excluding the soil backfill and the course aggregate. The soil backfill and course aggregate will be provided by WMH free of charge from on-site stockpiles.
- D. Contractor shall be responsible to haul the soil backfill material from an onsite stockpile identified by WMH. WMH will load the Contractors vehicles at the stockpiles. Contractor shall haul drilling spoils and ancillary trash to the active workface of the landfill for cover and compaction by the County at no cost to the Contractor.
- E. All drilling shall be conducted in accordance with the applicable State and local regulations.

7.2 WELLHEAD AND APPURTENANCES

- A. Basis of measurement: Each (EA). Measurement shall be based on each wellhead installed and accepted.
- B. Basis for payment: Payment will be by the unit price quoted in the base bid schedule. The quoted price shall include full compensation for all labor, materials, and equipment necessary to install each QED wellhead, complete in place. The scope of work for this bid item includes the procurement, installation of 2-inch diameter wellheads and appurtenances on the new vertical LFG wells, and connection to the new HDPE lateral. Wellhead details are provided in Design Plans and these Technical Specifications.

END OF SECTION